

**THE MARKET REACTION ON THE ANNOUNCEMENT OF TAX  
AMNESTY LAW NUMBER 11 YEAR 2016  
(EVENT STUDY ON THE COMPANIES LISTED IN PEFINDO25 INDEX)**

**UNDERGRADUATE THESIS**

This undergraduate thesis is submitted in partial fulfillment of the requirements to  
obtain the degree of *Sarjana Ekonomi* in Faculty of Economics  
Yogyakarta State University



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**2018**

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## VALIDATION

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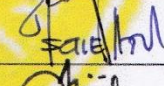
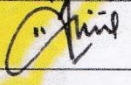
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Hereby declared that this undergraduate thesis is my own original work. According to my knowledge, there is no work or opinions written or published by other, except as reference or citation by following the prevalent procedure of scientific writing.

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## MOTTO

Then surely with difficulty comes ease.

(QS. Alam Nasyroh: 5)

Then surely with difficulty comes ease.

(QS. Alam Nasyroh: 6)

"Keep your eyes on the stars and your feet on the ground"

— Theodore Roosevelt

"In this life we cannot always do great things. But we can do  
small things with great love"

— Thomas Jefferson

"Minds are like parachutes, they only function when open"

— Walt Disney

"Success is a journey, not a destination"

— Thomas Ogden

## **DEDICATION**

**To my mother who could not see this undergraduate thesis completed  
and to my father for his ongoing love and support.**

**REAKSI PASAR TERHADAP PENGUMUMAN UNDANG-UNDANG  
AMNESTI PAJAK NOMOR 11 TAHUN 2016  
(STUDI PERISTIWA PADA PERUSAHAAN-PERUSAHAAN YANG  
TERDAFTAR DALAM INDEKS PEFINDO25)**

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**ABSTRAK**

Tujuan penelitian ini untuk membuktikan secara empiris adanya kumulatif abnormal *return*, kumulatif abnormal volume perdagangan, dan kumulatif abnormal kapitalisasi pasar di periode sekitar pengumuman Undang-Undang *Tax Amnesty*.

Jenis penelitian merupakan penelitian kuantitatif dengan menggunakan data sekunder yang diperoleh dari laporan tahunan perusahaan. Populasi penelitian adalah 25 perusahaan yang terdaftar dalam Indeks Pefindo25 di Bursa Efek Indonesia. Teknik pengambilan sampel yang digunakan adalah *purposive sampling* pada perusahaan yang terdaftar dalam Indeks Pefindo25 periode Februari sampai Juli 2016. Teknik analisis data yang digunakan adalah *t-test*.

Hasil penelitian ini menunjukkan bahwa terdapat kumulatif abnormal *return*, kumulatif abnormal volume perdagangan, dan kumulatif abnormal kapitalisasi pasar pada periode sekitar pengumuman Undang-undang *Tax Amnesty*.

Kata kunci: amnesti pajak, abnormal *return*, abnormal volume perdagangan, abnormal kapitalisasi pasar

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**ABSTRACT**

This study aims to provide empirical evidence on the existence of cumulative abnormal return, cumulative abnormal trading volume, and cumulative abnormal market capitalization in the period around the announcement of the Tax Amnesty Act.

This type of research is a quantitative research using secondary data obtained from the company's annual reports. The research population included 25 companies listed in Pefindo25 Index in Indonesia Stock Exchange. Purposive sampling was used and it involved all companies listed in the period of February to July 2016. Data analysis technique used was t-test.

The results of this study indicate that cumulative abnormal return, cumulative abnormal trading volume, and cumulative abnormal market capitalization existed in the period around the announcement of the Tax Amnesty Act.

Keywords: tax amnesty, abnormal return, abnormal trading volume, abnormal market capitalization



## **FOREWORD**

I would like to thank Allah the Almighty that has given me His bless and His mercy so that this undergraduate thesis entitled “The Market Reaction on the Announcement of Tax Amnesty Law Number 11 Year 2016 (Event Study on the Companies Listed in Pefindo25 Index)” finally finished. I realize that it would have been not possible without the support of many people. Therefore, I would like to express my deepest gratitude to the following.

1. Prof. Dr. Sutrisna Wibawa, M.Pd, Rector of Yogyakarta State University.
2. Dr. Sugiharsono, M.Si., Dean of Faculty of Economics of Yogyakarta State University who had gave the research permission for this undergraduate thesis.
3. Rr. Indah Mustikawati, S.E., M.Si., Ak., Head of Accounting Education Department who give support so that this undergraduate thesis could be completed.
4. Dr. Denies Priantinah, S.E., M.Si., CA., Head of Accounting Study Program and my academic supervisor who had provided assistance, guidance, and advice during the study period.
5. Dr. Ratna Candra Sari, S.E., M.Si, Akt., my supervisor who had been kindly supervise, had been pleased to take the time to provide input, advice, suggestion, and motivation and encourage me during the research.
6. Mimin Nur Aisyah, M.Sc., Ak., my second supervisor who had provided advise during the research.

7. All lecturers of Yogyakarta State University who had provided guidance to be able to master the subjects needed in the work place.
8. I want to express my gratitude to the following people for their constructive comments and suggestions, patience and support: my parents, my sisters (Mba Endah & Ka Rini), my brother (Mas Didik), and my special friends (Yasenda, Kiki, Amra, Kak Shifa, and Kak Rofi).
9. Akuntansi Unggulan 2014. Keep Fighting Guys! See you on top.
10. KMS UNY. Thanks for the experience and new friend.
11. All parties who cannot be mentioned individually but had provided me all their supports and assistance during the research process.

May God gives the best for all the people mentioned above. Finally, I hope that this work will be useful for the readers.

Yogyakarta, January 15, 2018  
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## TABLE OF CONTENT

COVER PAGE.....	i
APPROVAL.....	ii
VALIDATION.....	<b>Error! Bookmark not defined.</b>
DECLARATION OF AUTHENTICITY.....	<b>Error! Bookmark not defined.</b>
MOTTO .....	v
DEDICATION .....	vi
<i>ABSTRAK</i> .....	vii
ABSTRACT.....	viii
FOREWORD .....	ix
TABLE OF CONTENT .....	xi
LIST OF TABLE .....	xiii
LIST OF FIGURES .....	xiv
LIST OF APPENDICES .....	xv
CHAPTER I.....	1
INTRODUCTION .....	1
A. Problem Background .....	1
B. Problem Identification .....	6
C. Problem Restriction .....	7
D. Problem Formulation.....	7
E. Research Objectives.....	8
F. Research Benefits .....	8
CHAPTER II.....	10
LITERATURE REVIEW .....	10

A. Theoretical Review .....	10
B. Relevant Research .....	32
C. Conceptual Framework.....	35
D. Research Hypothesis.....	37
CHAPTER III .....	39
RESEARCH METHODS .....	39
A. Types of Research.....	39
B. The Place and Time of Research .....	39
C. Population and Sample of Research .....	39
D. Operational Variable Definition .....	41
E. Data Collection Techniques.....	49
F. Data Analysis Techniques .....	49
CHAPTER IV .....	53
RESEARCH RESULT AND DISCUSSION .....	53
A. Description of Research Data .....	53
B. Results of Hypothesis Test .....	58
C. Discussion.....	61
D. Research Limitation.....	65
CHAPTER V.....	66
CONCLUSION AND SUGGESTIONS .....	66
A. Conclusion .....	66
B. Suggestions .....	66
REFERENCES.....	68
APPENDIX.....	72

## LIST OF TABLE

Table	Page
1. List of Companies Registered in Pefindo25 Index Period February 2016- July 2016.....	41
2. Cumulative Abnormal Return for All Stock in the Various Window Period.....	53
3. Data Description of Cumulative Abnormal Return in the Various Window Period.....	54
4. Cumulative Abnormal Trading Volume for All Stock in the Various Window Period.....	55
5. Data Description of Cumulative Abnormal Trading Volume in the Various Window Period.....	56
6. Cumulative Abnormal Market Capitalization for All Stock in the Various Window Period .....	57
7. Data Description of Cumulative Abnormal Market Capitalization in the Various Window Period.....	58
8. Cumulative Abnormal Return Test Result for Various Window Period.....	59
9. Cumulative Abnormal Trading Volume Test Result for Various Window Period.....	59
10. Cumulative Abnormal Market Capitalization Test Result for Various Window Period.....	60
11. Summarize the Significant Result for Various Window Period.....	61

## LIST OF FIGURES

Figure	Page
1. Typical Timeline of an Event Study with Significant Dates.....	19
2. Schema Framework.....	37



## LIST OF APPENDICES

Appendix	Page
1. The Calculation Results.....	73
2. Test Results.....	127

## **CHAPTER I INTRODUCTION**

### **A. Problem Background**

The capital market is a medium to collect long-term funding sources in the community. The function of the capital market is as intermediaries and mechanism of efficient allocations of funds. As an intermediary institution, the capital market connects parties with excess funds to those who need funds. The mechanism of efficient allocation of funds, the capital market provides an alternative investment that provides the most optimal return (Tandelilin, 2010: 26).

Stable economic conditions will affect the stability of activities in the capital market. Not only economic factors, non-economic factors are also able to affect the stability of capital markets. The influence of non-economic environment cannot be separated from stock exchange activities such as environmental awareness, human rights, and political events are often the main factor triggering fluctuations in stock prices in the stock exchanges around the world. The increasing importance of the role of the stock market in economic activities, making the stock exchanges more sensitive to various events around it, whether directly related or not directly related to economic issues.

An efficient market capability for receiving information is explained in signaling theory. This theory explains that signals arising from good information coming from the external company (government policy, inflation, natural disasters, etc.) while internal company (company management policy) will directly

affect the price movement of related companies (Bhattacharya & Dittmar, 2001: 5). In the efficient market, investors are required to find out both economic and non-economic events that include political, social, and cultural events and then to be analyzed to determine investment decisions.

An event that investors have been concerned is the enactment of the Tax Amnesty Act in Indonesia. Tax amnesty is a forgiveness program granted by the government to a taxpayer covering the abolition of taxes that ought to be owed, the abolition of tax administration sanctions, and the elimination of criminal sanctions in the field of taxation on assets acquired in 2015 and earlier, which have not been reported in the tax return (SPT), by paying off all outstanding tax arrears and paying ransoms ([www.pajak.go.id](http://www.pajak.go.id)).

The background of tax amnesty applies to the taxpayers are: (1) there are assets owned by citizens, both inside and outside the country which were not or have not been fully reported in the annual income tax return; (2) to increase state revenues and economic growth also public awareness and compliance in the implementation of tax obligations, it is necessary to issue a policy of Tax Amendment; and (3) the case of Panama Papers involving a number of Indonesian entrepreneurs investing in a company that was deliberately established in tax heavens.

Tax amnesty aims to: (1) accelerate the growth and restructuring of the economy through the transfer of assets, which will affect increasing on domestic liquidity, an improvement on the rupiah exchange rate, decreasing at an interest

rate, and increasing on investment; (2) encouraging tax reform to a more equitable taxation system and a more valid, comprehensive, and integrated tax database expansion; and (3) increasing tax revenues, which will be used for development financing.

The enactment of Law Number 11 year 2016 about Tax Amnesty provides positive news for the domestic stock market. The increase in capital market performance is due to optimism from market players and the relevant authorities that there will be massive funding from the Tax Amnesty program. The better economic growth will trigger the flow of foreign funds to re-enter Indonesia primarily through the stock market. It can be seen from several research studies, one of them is according to Head of Research PT. NH Korindo Securities Indonesia Reza Priyambada stated a positive response that continues driving the rise of Composite Stock Price Index (IHSG) after the enactment of the Law Number 11 year 2016. If the tax amnesty policy is a positive thing for investors, it can generate a positive return for them or in other words the return earned is greater than expected returns. Conversely, if this event raises a negative response so the return earned by investors is a negative return. The return earned by these investors is called the abnormal return. Jogyanto (2010: 556) states if the event contains information on the market then there will be abnormal return and the contrary, if it has not information content on the market then there will be no abnormal return.

To assess the stock is good or bad can also be seen from the amount of change in stock trading volume or often called as a trading volume activity.

Zamroni (2003: 32) states when TV (trading volume) tends to increase when prices decline, then the market is indicated in a bearish condition. When TV tends to increase during prices increase, the market is indicated in a bullish condition (optimistic). When the volume tends to decline following the price that also decreases, then the market is in a bullish condition. And if the TV tends to decline during prices rise, the market is in a bearish condition.

The capital market response to an event can not only be seen from the abnormal return and trading volume, but it also can be seen from the market capitalization. Market capitalization is the market value of the issued share (outstanding share) of an issuer (Raharjo, 2006: 41). In general, large capitalized stock is the target of investors for long-term investments because of the potential growth of the company in addition to dividend payouts and overly low-risk exposure. Because a lot of enthusiasts, the stock price is relatively high, so it will give a high return as well. A large market capitalization will generally attract investors in choosing stocks. The greater the market capitalization of a stock, the investor will hold it longer because the investors assume that big companies will tend to be more stable in terms of finance, have low risk, and have good prospects in the long term with the large return expectation.

Discussed about the impact of government policy, the economic condition of the country needs to identify. The Indonesia economy is basically characterized by grassroots SMEs (Small and Medium Enterprises) that make up nearly 99.95 percent of the total number of enterprises. There are 41 million small economic

units in the overall economy (including the agricultural sector), 60,000 medium-sized enterprises and more than 2,000 large enterprises. There is a need to increase the productivity of the SME sector. The productivity gap between the SME sector and large enterprises is so wide that the value added per worker in the SME sector is about 0.5 percent of that of the large enterprises on average.

Indonesia's Finance Minister Sri Mulyani Indrawati emphasizes the importance of cooperation between the government and Indonesia's micro, small and medium enterprises (including startups). Indrawati stated that Indonesia's micro, small, and medium sized enterprises are the backbone of the Indonesian economy. These enterprises account for 99 percent of the total amount of enterprises that are operating in Indonesia and they create a total of 107.6 million jobs in Southeast Asia's largest economy. Moreover, Indonesia's micro, small and medium-sized companies contribute 60.6 percent to Indonesia's gross domestic product (GDP). All these facts indicate the importance of the existence of these companies. In fact, they cushion the country's economy in times of shocks. However, the majority of these companies does not pay taxes, while most workers belong to the informal sector. To lure small medium enterprises (SMEs) into the tax system, the law also offers a 0.5 or 2 percent redemption rate for SMEs, depending on business size. Such initiative was applauded by the business community considering the substantial size of this business segment.

In this era, the capital market is an important part of the Indonesian economy, beside of the banking sector. The Indonesian capital market consists of



hundreds of small, medium, and large companies listing their stock. Some study about the impact of tax amnesty is only performed on large companies such as those listed in the LQ45 Index, Kompas 100 Index, and so on. The Indonesian economy dominated by small and medium enterprises, therefore it is necessary to investigate the implications of tax amnesty policy on those small and medium enterprises. The impact of the tax amnesty announcement on small and medium enterprises can be represented by looking at market reactions in the Pefindo25 Index. The Pefindo25 Index is an index that lists 25 small and medium-sized issuers.

Based on the background of the problem, the author is interested in analyzing the effects of the tax amnesty announcement on abnormal return, trading volume, and market capitalization, particularly in small and medium enterprises listed in the Pefindo25 Index, with the measurement variable is the cumulative of abnormal return, cumulative of abnormal trading volume, and cumulative of abnormal market capitalization. For that, the author is interested to conduct further research entitled "THE MARKET REACTION ON THE ANNOUNCEMENT OF TAX AMNESTY LAW NUMBER 11 YEAR 2016 (Event Study on the Companies Listed in Pefindo25 Index)".

## **B. Problem Identification**

Based on the description of the background, then the problem identification for this research are as follows.

1. The capital market is an important part of the Indonesian economy. The Indonesian capital market is influenced by many factors, both economic and non-economic.
2. The impact of tax amnesty policy imposed by the Indonesian government on the Indonesian economy need to be investigated.
3. The tax amnesty announcement is predicted to create a market reaction to the Indonesian capital market.
4. As Indonesian economy dominated by small and medium enterprises, it is important to investigate the impact of the tax amnesty announcement on their reactions in capital market.

#### **C. Problem Restriction**

Based on the problem background and the problem identification, the issues need to be restricted in this study are the capital market reaction on the Announcement of Tax Amnesty Law Number 11 Year 2016 especially on the stock listed in the Pefindo25 Index with the variable analyzed is abnormal return, abnormal trading volume, and abnormal market capitalization.

#### **D. Problem Formulation**

Based on the description that have been presented, the problem formulation of this study is as follows.

1. Is there any cumulative abnormal return on the stock of the companies listed in the Pefindo25 Index in the period around the announcement of the tax amnesty policy?

2. Is there any cumulative abnormal trading volume on the stock of the companies listed in the Pefindo25 Index in the period around the announcement of the tax amnesty policy?
3. Is there any cumulative abnormal market capitalization on the stock of the companies listed in the Pefindo25 Index in the period around the announcement of the tax amnesty policy?

#### **E. Research Objectives**

Based on the problem formulation, the purposes of this research are to investigate.

1. The existence of cumulative abnormal return on the stock of the companies listed in the Pefindo25 Index in the period around the announcement of the tax amnesty policy.
2. The existence of cumulative abnormal trading volume on the stocks of the companies listed in the Pefindo25 Index in the period around the announcement of the tax amnesty policy.
3. The existence of cumulative abnormal market capitalization on the stocks of the companies listed in the Pefindo25 Index in the period around the announcement of the tax amnesty policy.

#### **F. Research Benefits**

The result of this research is expected to provide benefits in terms of theoretical and practical.

1. Theoretical Benefits

a. For Academics

The results of this study are expected to contribute to the development of accounting science, especially in the field of Portfolio Theory and Investment Analysis.

b. For Further Research

The results of this study are expected to be a reference material and comparison for further research studies in the event study.

2. Practical Benefits

a. For the Government

This research is expected to be a source of reference to analyzing the impact of tax amnesty on the capital market in terms of policy formulation.

b. For Investor

This research is expected to provide an overview of the influence of economic policy to the capital market. In addition, it can be helpful in considering the aspects not only in terms of finance but in terms of non-financial.

c. For Companies

The results of this study are expected to be used as a reference for decision making by corporate management.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **A. Theoretical Review**

##### **1. Capital Market**

The market is defined as a meeting place for sellers and buyers to exchange goods and services. The definition of capital markets or stock exchanges is a type of market which is investors meet to sell or buy securities, so the capital market is a part of demand and trade theory that is closely related to the turnover of money within a market economy. According to Sunariyah (2003: 4), the capital market is an organized system, including commercial banks and all institutions in the field of finance and overall outstanding securities. While the meaning of capital market in the strict sense is a market ready to trade stocks, with other types of services. The capital market is a market in the abstract sense that brings prospective investors with issuers (companies that have securities in the capital market) that require long-term funds.

The Indonesian capital market has been reborn after President Soeharto inaugurated the Jakarta Stock Exchange on August 10, 1977, as a result of Presidential Decree No.52 year 1976. Then in 1990, the number of companies listed on the Jakarta Stock Exchange was 127. Up to 2009, the number of listed companies became 342. The increase in the capital market caused by demand from foreign investors who evaluate the capital market in

Indonesia in those years has advanced rapidly and has good prospects (Usman et al, 2004: 10).

Capital market instruments are all securities that are commonly traded through the capital market. According to the Decree of the Minister of Finance No.1548/ KMK.013/ 1990 dated December 4, 1990, the meaning of securities is a letters of recognition of debt, commercial papers, shares, bonds, credit securities, debt certificates, rights, warrants, options or derivative of securities or an instrument established by Bappepam. Securities traded on long-term capital markets. The most common instruments traded on Indonesia stock exchanges are the stock and bond (Martono & Harjito, 2007: 367).

According to Jogiyanto (2000: 51), capital market in Indonesia has two forms, namely the primary capital market and secondary market. The primary market is the market for the first time securities are offered and sold to the public. In this transaction, the relationship occurs between an investor with a company issuing securities (issuer) through the brokers. Meanwhile, the secondary market is a market for securities that already exist in the hands of the community and traded among members of the community itself, thus money flows from one investor to another investor.

The secondary market is a market that trades stocks after passing the primary market, so the proceeds of the sale of stock are not for the company's capital, but it flows to the stockholders (Jogiyanto, 2000: 53). Stock prices in the secondary market are determined by demand and supply between buyers



and sellers, the amount of demand and supply is influenced by several factors, there are: (a) internal factors of the company, related to the internal policy of a company and the performance achieved. This relates to things that management should be able to control. For example, income per share, dividend share divided, company management performance, and future corporate prospects; (b) external factors of the company, it is things beyond the ability of the company or beyond the ability of management to control. For example, the emergence of political turmoil in a country, changes in monetary policy, and high inflation rate. One of the government policies that attract the investors is the tax amnesty policy imposing by government on June 27, 2016.

## 2. Tax Amnesty

### a. Definition

Tax amnesty is a government policy in the field of taxation that provides the abolition of taxes that ought to be owed by paying a ransom in a certain amount which aims to provide additional tax revenue and opportunity for the non-compliant taxpayer to be a compliant taxpayer. Implementation of tax amnesty is expected to encourage increased voluntary compliance of taxpayers in the future (Devano, 2006: 137). According to the Sawyer (2006: 2) tax amnesty generally involves providing previously noncompliant taxpayers with the opportunity to pay back taxes on undisclosed income, without fear of penalties or prosecution.

According to the government through the Tax Directorate, the policy of tax amnesty is a policy breakthrough driven by the smaller possibility to hide wealth outside the Republic of Indonesia due to the increasingly transparent global financial sector and the increasing intensity of information exchange between countries. The tax amnesty policy also will not be given periodically. At least, up to the next few decades, the tax amnesty policy will not be enforced. Tax amnesty is expected to result in tax revenue that not yet paid or underpaid, in addition to increasing tax pay compliance. Increased compliance is also the impact of more effective controlling because of the more accurate information about the list of taxpayer's wealthiest.

b. Target of tax amnesty

The targets of tax amnesty policy are as follows.

- 1) Individual taxpayer.
- 2) Agency taxpayer.
- 3) Taxpayers engaged in the field of micro, small, and medium enterprises (SMEs).
- 4) Personal person or agency that has not become a taxpayer.

c. Requirements

Taxpayer requirements of tax amnesty as follows.

- 1) Has a taxpayer identification number.
- 2) Pay the ransom.

- 3) Pay off all tax arrears.
- 4) To pay taxes that are not or less paid or to pay taxes that should not be returned to the taxpayer being examined for initial evidence and or investigation.
- 5) Deliver the last annual income tax letters for a taxpayer who has obligation to submit Annual Income Tax Return Form. Revoke the request: refund of tax overpayment; reduction or abolition of administrative sanctions in the Tax Assessment Letter and/or Tax Collection Letter in which the principal tax is due; abolition or cancellation of an incorrect tax assessment; objections; rectification of tax assessment letters and decree; appeal; lawsuit; and/or review, in the event that the Taxpayer is applying and has not yet been issued a decision letter or decision.

d. Period of tax amnesty

The tax amnesty has been in force from March 31, 2017, and is divided into 3 (three) periods, namely.

- 1) Period I: From July 1, 2016 until September 30, 2016.
- 2) Period II: From October 1, 2016 until December 31, 2016.
- 3) Period III: From January 1, 2017 until March 31, 2017.

e. Mechanism of tax amnesty

Tax office where the registered taxpayer or other place is determined by the Minister by bringing the Statement Letter. Tax office

where the registered taxpayer or other place determined by the Minister is also the initial place to be addressed to request an explanation of the filling and fulfillment of the completeness of the documents which must be attached in the Statement Letter.

The procedures for filing the tax amnesty are as follows.

- 1) The taxpayer comes to the tax office where the registered taxpayer or other place is determined by the Minister to request an explanation of the completion and fulfillment of the documents that must be attached in the Statement Letter, namely:
  - a) proof of payment of the redemption;
  - b) proof of payment of tax arrears;
  - c) a list of details of the property along with ownership information of reported assets;
  - d) debt list as well as supporting documents;
  - e) proof of payment of tax, which is not or less paid or tax, which should not be returned for the Taxpayer being examined for initial evidence or investigation;
  - f) photocopy of last annual income tax letters; and
  - g) a letter of withdrawal of all applications that have been submitted to the Directorate General of Taxes
  - h) statements transferring and investing treasury into the territory of the Unitary State of the Republic of Indonesia at the most for

a period of 3 (three) years from the date of transfer in the event that the taxpayer will carry out repatriation;

- i) attach a declaration not to transfer the treasury out of the territory of the Unitary State of the Republic of Indonesia at the most for a period of 3 (three) years from the issuance of the Certificate in the event that the taxpayer will carry out the declaration;
  - j) a statement concerning the amount of business circulation for taxpayers engaged in SMEs.
- 2) The taxpayer completes the documents that will be used to file the tax amnesty through the Statement Letter, including paying the ransom, paying the tax arrears, and paying the taxes that are not or less paid or taxes that should not be returned for the taxpayer being examined for initial evidence or investigation
  - 3) The taxpayer delivers a declaration letter to the tax office where the registered taxpayer or the other place determined by the Minister of Finance.
  - 4) The taxpayer will get a receipt of the Statement Letter.
  - 5) Minister or officer appointed on behalf of the Minister issue a Certificate within a period of maximum 10 (ten) working days as from the date of receipt of the Statement Letter and its attachment and send the Tax Amnesty Letter to the taxpayer.

- 6) In the case of the period of 10 (ten) working days as referred to in paragraph (4) The Minister or official appointed on behalf of the Minister has not issued the Certificate, the Statement Letter shall be deemed accepted.
- 7) A taxpayer may submit a Statement at the latest 3 (three) times within a period of time as from this Law come into force until 31 March 2017 where the Second and Third Statement Letter may.

Investigating the effect in the capital market for the announcement of the tax amnesty policy in this study uses the event study method.

### 3. Event Study

The first step in an event study is the definition of the event. In most cases, one focuses on the announcement as it releases new information to the stock market rather than the actual underlying event that will often take place much later. Often the announcements are statistically significant while the actual events are statistical nonevents. Two problems typically arise in this context. First, most major corporate announcements that might have a large effect on the stock price are made after the market closes. Since the capital market can only react to the news on the following trading day the earliest, it is essential to include the next trading day in the analysis of abnormal, i.e., event-specific, returns. Second, it is possible, that the information was not new to at least some market participants. The market might have anticipated the



event before it was officially announced, or some market participants might have had some inside information and been trading on it. To deal with this issue, the time included before the actual event should be longer when information leakage is more likely.

The time period, during which the abnormal returns are calculated to measure the effects of the event, is called the event window. By convention, the day, on which the new information was announced or otherwise revealed, is labelled day 0, and the event window is a surrounding interval of varying length. To deal with the problem of fully capturing the event-specific effects, one might want to choose the event window rather larger. However, another difficulty arises: the longer the event window, the more likely it becomes that a confounding event might have had an influence on the stock price. Hence, the event window “should be long enough to capture the significant effect of the event, but short enough to exclude confounding effects (Hauswald, 2002: 1-2).

The timeline of an event study usually consists of two parts: the actual event period, surrounding the event day and a preceding estimation period (see Figure 2.1). While the estimation window spans the stock prices in the time from (T1-T2), and the event window spans the stock prices in the time from (T3-T4). An alternative estimation window (T5-T6) might as well be included in the analysis. In general, the event and estimation windows should not

overlap because the normal return estimator should not be influenced by unusual price effects that the event period is supposed to capture.

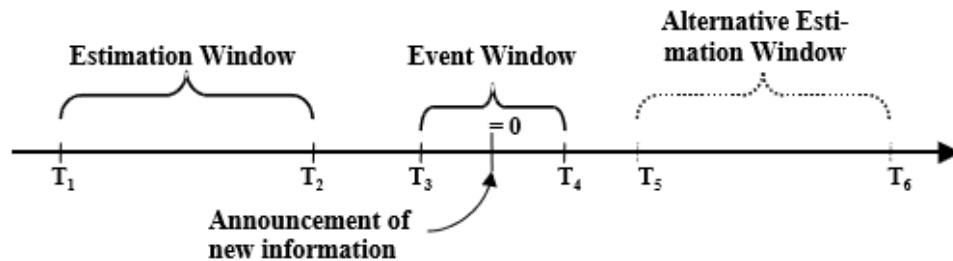


Figure 2.1: Typical timeline of an event study with significant dates

According to Jogiyanto (2013: 585), the event study is studying the market reaction to an event whose information is published as an announcement. Event study can be used to test the informative content of an announcement and is also used to test the market efficiency of the semi strong form. The observation period (event window) has varying length, the length of the commonly used window ranges from 3 days - 121 days for daily data and 3 months - 121 months for monthly data. While the duration of the estimation period commonly used is in the range of 100 days - 300 days for daily data and ranging from 24 to 60 months for monthly data.

According to Nainggolan (2010: 17) event study consists of two types. The first type is the efficiency study used to assess how fast and how well a market responds to various information. Then the second type is the usefulness of information, as an example is used to indicate the value contained from news published to the return company. In the event study, used several

periods, namely the estimation period, window period, and the period when the occurrence of events. The length of the window period varies. The length of the window depends on the type of event. If the event is an event whose economic value can be easily determined by the investor (e.g. earnings announcement and dividend announcement). The window period can be short or long, depending on how fast the reaction from the investor. The event study method can investigate the market reaction.

#### 4. Efficient Market Theory

Basically, this research wants to test how the market reacts to government events. The reaction shown by the market can be either positive or negative. Positive if an information can increase stock prices in the stock market and is negative if applicable otherwise. If the market can react quickly and appropriately to achieve a new equilibrium price that fully reflects the available information, then such conditions are called efficient markets (Jogiyanto, 2000: 351).

##### a. Efficient Market Requirements

The efficient market requirements are as follows.

- 1) Disclosure of information; information can be obtained easily, quickly, and for free.
- 2) Rates may change freely; prices cannot be intervened by either buyers or stock sellers, and the law prohibits price manipulation.

- 3) The market always in balance condition; an efficient market when it gets new information, then the price will quickly adjust and will achieve a price balance.

b. Efficient Market Characteristics

The characteristics of efficient market as follows.

- 1) Stock prices respond quickly and appropriately to new information.
- 2) Price changes occur randomly, which means the current price changes not affected by price changes in the past.
- 3) Cannot determine which stocks are profitable or harmful in the future.
- 4) In terms of information, it cannot be distinguished between naive investors or sophisticated investors because no further analysis is needed to make investment decisions.

c. Efficient Market Forms

Jogiyanto (2000: 352) explains the key to measuring efficient markets is the relationship between the price of securities and information

1) Efficient Market Weak Form

Efficient markets in weak form mean the market prices of securities fully reflect past information. Therefore, such historical information (such as price and trading volume, and other events in the future) can no longer be used to predict future price changes, as already reflected in current prices. This means that for markets that

are of weaker form efficiency, investors cannot use past information to gain an abnormal profit.

2) Efficient Market Semi Strong

An efficient market in the semi strong form means a market price of securities fully reflect all published information (such as earnings, dividend, stock split announcements, new stock issues, financial difficulties at the company, and other public events affecting company cash flow in the future). In an efficient market of semi strong form, abnormal return occurs only around the announcement (publication) of an event as a representative of the market response to the announcement. A market is declared efficient in a semi strong form when the information is quickly absorbed or responded by the market (within one to two spot time or day around the announcement). The prolonged abnormal return of more than three time spots reflects some of the late market responses in absorbing or interpreting information, and thus considered the market inefficient in a semi strong form.

3) Efficient Market Strong Form

An efficient market in strong form means the market prices of securities fully reflect all information including private information (unpublished information). In a strong efficient market,

there will be no investor who can obtain an abnormal return because it has private information.

## 5. Signaling Theory

Wang (2010) in his research states that every time when a positive signal comes from the government, most investors expect an increase in the index and give an abnormal return to the market. However, when a negative signal comes from the government, there will be decreasing stock sales. When the market suffers from a prolonged depression, the government is expected to carry out a rescue plan. Once the plan comes, investors follow the flow and this causes high market volatility.

Signaling theory is a theory that looks at the signs about the conditions that describe a company. The signaling theory states that a good quality of the company will deliberately signal to the market, thus the market can be expected to differentiate a company of good quality and poor quality. In order for the signal is good, it should be captured and perceived good market and not easily imitated by companies that have poor quality. Information published as an announcement will signal investors in making investment decisions. If the announcement contains a positive value, it is expected that the market will react when the announcement is received by the market (Martono and Harjito, 2007: 11). The market reaction measuring by 3 indicators, namely abnormal return, trading volume, and market capitalization.

## 6. Abnormal Return

In an efficient market, the price of a security should reflect information about the risks and expectations regarding future returns. Returns commensurate with stock risk are called normal returns. Whereas if the market is inefficient, securities will result in a greater than normal return, called abnormal return (Tandelilin: 2010: 210). While Jogiyanto (2010: 556) states if used abnormal return, it can be said that an announcement that has informative content will provide an abnormal return to the market. Conversely, that has not informative content does not give abnormal return to the market.

Abnormal return by Jogiyanto (2010: 579) is the difference between the actual return and the expected return. Abnormal return or excess return is the excess of the actual return occurs to the normal return. The normal return is the expected return of the investor by considering the level of risk. The actual return is actually a return that occurs at time t-which is the difference in the relative current price to the previous price. Return of expectation is a return that must be estimated. Brown and Warner (1985: 6) estimate the expected returns with three following models.

### a. Mean-adjusted model

This model assumes that the expected return is consistent with the average of the previous realized return over the estimation period. The estimation period is the period before the window period. The

window period, usually consists of the day before the event, the day of the event, and the day after the event. The window period on the day before the event to determine whether there is information leakage, whether the market indicates acknowledge the information before the information is announced. Then on the day of the event shows the market reaction on the date of announcement and on the day after the event to know how fast of market reaction.

b. Market model

The calculation of the expected return with the market model is conducted by 2 steps, forming the expectation model using the data of realization during the estimation period and using the expectation model to estimate the expectation return in the window period. Expectation models can be formed using the OLS (Ordinary Least Square) regression technique.

c. Market-adjusted model

This model assumes the best estimator to estimate the return of a securities is the market index return at that time. Using this model, it is not necessary to use an estimation period to form an estimation model because the estimated security return equals the market index return. Abnormal returns with a market-adjusted model can be calculated by subtracting the returns incurred for each of the securities with the market index return on the same day.



Besides using abnormal return, the other indicator to measure the market reaction is trading volume.

## 7. Trading volume

According to Pramana (2012: 15) trading volume of the stock is one indicator evaluating market reaction to an announcement. Trading volume (TV) is an instrument that can be used to see the capital market reaction to information through the parameters of movement of trading volume in the market. The development of stock trading volume reflects the strength of supply and demand, which is a reflection of investor behavior. Rising trading volume is an increase in trading activity of investors in the stock exchange. Increasing the volume of demand and supply of a stock will give the greater impact on stock price fluctuations in the stock, and increasing the volume of stock trading shows the growth for the public demand that has an impact on rising prices or stock returns.

The stock trading volume approach can be used as a proxy for market reaction, in which stock trading volume more reflects investor activity due to a new information through the sum of trade shares. Judging from its function, it can be said that TV is a variation of an event study. The difference between the two lies in the parameters used in measuring the market reaction to an event. Trading volume is a sum of the volume of each trading transaction occurring in the stock exchange at a particular time and certain stock.

According to Zamroni (2003: 32) trading volume is a key element in making predictions of stock price movements. Volume tends to increase when the price decreases, then market indicated in bearish condition. When the volume tends to increase as long as the price rises, then the market is indicated in a bullish condition. When the volume tends to decrease as long as the selling price decreases, then the market is a bullish condition, and when the volume tends to decrease due to the price increases, the market is a bearish condition. Bearish is a sluggish market situation, analogous to a big bear and hunchback like not having passion. While bullish is a passionate market situation, it is analogous to a bull that always seems eager when running and attacking something.

From the opinion of experts, it can be concluded that the trading volume is the total amount of securities (stocks) traded at a certain time, where trading volume reflects the preferences of the capital market participants in conducting transactions. To evaluate the effect of the tax amnesty announcement in the capital market, the market capitalization can be used as an indicator.

#### 8. Market Capitalization

Market capitalization is the value of a firm based on the calculation of the stock market price multiplied by the number of outstanding shares. So, more expensive the stock price of a company in the market and more number of stock circulate in the market will make the market capitalization of the

company is getting bigger. A large market capitalization is generally one of the attractiveness of investors in choosing stocks. The increase of the market capitalization of a stock, the investor will hold longer the stake because investors think that big companies will be more stable in financial terms, has low risk, and has better prospects in the long run with the expectation of a big return.

The market capitalization value of the stock certainly changes according to market price changes. This market value is determined by the demand and supply of the relevant shares in the stock market (Hartono, 2005: 135). Company's capitalization is based on the cost of fixed capital used in a company. A company can experience an overcapitalization and undercapitalization situation.

Overcapitalization will occur if the earnings are small and not enough to get fair of return from the amount of capital invested, or in other words, the average rate of return is smaller than the fair rate of return. Or it could happen if the total value of shares in circulation is greater than the real value compared to the value of its assets. Undercapitalization occurs when the average rate of return of the firm is higher than the rate of return on the capital invested in other similar companies or the amount of stock value listed on the balance sheet is smaller than the real value of its assets.

Based on the opinion of experts it can be concluded that market capitalization is a company value that is calculated based on the market price

per share of a certain period multiplied by the number of shares outstanding in a certain period. The market reaction on the tax amnesty announcement that will be investigated is stocks listed in Pefindo25 Index. This index is one of the existing indexes in the capital market.

#### 9. The Pefindo25 Index

In the Indonesia Capital Market, where securities houses mostly covered the “big cap” companies, Pefindo stands as a pioneer in valuing listed SME, to provide better knowledge for investors and improve liquidity of SMEs’ stocks. As a supporting party for Indonesia Capital Market, Pefindo Equity & Index Valuation Division distinguish itself as a catalyzer especially by providing fundamental research of listed Small Medium Enterprises (SME). In time, Pefindo Equity & Index Valuation Division has successfully established its position as the pioneer of valuing SMEs’ shares and creates benchmarks for SMEs’ stock performance, through SMEs’ Index, which is Pefindo25. On May 18, 2009, IDX together with Pefindo and Investor Daily, launched a new stock index named as Pefindo25 SME Index. The index represents the stocks of Small and Medium Enterprises (SMEs) with good fundamental performances and liquidity that are listed in IDX. Pefindo25 Index consists of 25 stocks chosen based on their financial and liquidity performances, as well as their high number of public ownerships. IDX, Pefindo and Investor Daily will routinely monitor the stock components in the

Index calculation. Every twice a year, that is on first trading in February and August, the stocks listed in the Pefindo25 Index will be renewed and changed.

The Pefindo25 Index is the stock price index as a result of cooperation between Indonesia Stock Exchange (IDX) with Pefindo rating agency. This index is intended to provide additional investment information or guidance for investors, especially for small and medium issuers, by creating a new index benchmark that specifically makes the stock performance of Small and Medium Enterprises (SME) through criteria and consistent methodology (britama.com). The Pefindo25 Index consists of 25 stocks selected based on the following criteria.

- a. Total assets representing the size of SME issuers, i.e. issuers with total assets under IDR 5 trillion based on audited annual financial statements.
- b. The issuer's ROE included in this criterion is an issue that has an ROE equal to or greater than the average ROE of an issuer in the Indonesia Stock Exchange.
- c. The opinion of a public accountant on the Audited financial statements is Unqualified.
- d. It has been listed on the Indonesia Stock Exchange is at least 6 (six) months.

After the initial selection with some of the above criteria, then obtained a list of names of issuers that could potentially enter the members of the Pefindo25 Index. To select the best 25 stocks, the further rating is conducted

by considering the liquidity aspect and the number of stocks owned by the public (free float). Evaluation and replacement of stocks that entered the calculation of Pefindo25 index is every 6 months, i.e. at the beginning of February and August.

#### 10. Stock

Stock according to the Darmadji & Fakhruddin (2012: 5) represent a sign of participation or possession of a person or entity within a company or limited liability company. The stock is a sheet of paper explaining that the paper's owner is the owner of the company issuing the securities. Meanwhile, according to Mishkin and Eakins (2006: 5), stocks are securities representing the form of ownership in the company. These stocks may be used as evidence to request a stock of the gain or sale of the asset.

So it can be concluded that the stock is a financial instrument in the form of securities used as a sign of ownership of a company. Stock ownership may be transferable by sale on the stock exchange. Stocks are issued and marketed by a company through the primary market. Where in the primary market the stock price is determined by the company itself. When the stock was purchased by an investor in the primary market is transferred to the other party by sale, then the stock has entered the secondary market. In the secondary market, stock prices will fluctuate continuously. Such fluctuations occur due to changes in volume and number of stock transactions by stock sellers and stock buyers. This makes a stock made up of speculation by some

of the capital market players to make a profit. And because of the fluctuation of those stocks that results in the liquidity of the stock itself.

## **B. Relevant Research**

There are the various results of several previous studies relevant to this research, as follows.

1. Market Reaction to Seasoned Offerings in China by Jia Liu, Saeed Akbar, Syed Zulfiqar Ali Shah, Dayong Zhang, and Dong Pang (2016)

The research conducted by Liu et al. examine the stock market reaction to the announcement of various forms of seasoned issues in China. The result of this research is market reactions differ in ways that suggest a difference between management's internal assessment and the market's assessment of the stock price. The market responds unfavorably to the announcement, notably in the case of rights issues and also with regard to open offers. Private placements experience an unfavorable pre-announcement reaction, which contrasts with the favorable reaction after the event. Convertible bond issues generate positive excess returns consistent with the market's confidence that they can help to align management and shareholders' interests.

The similarity between research conducted by Liu et al. with this research is using of analytical method used, there are descriptive analysis and t-test for secondary data. While the difference in this study using the variable abnormal return, abnormal trading volume, and abnormal market capitalization to measure the reaction of the capital markets. Another

difference is this study also uses the population of companies listed in the Pefindo25 Index, whereas research conducted by Liu et al. uses variable abnormal return, and examine four types of issue announcement on short-term market price movement. The population uses the value-weighted Composite Index on the Shanghai and Shenzhen Stock Exchange as the market return for the companies listed on the respective stock exchanges.

2. The Informative content of Abnormal Trading Volume: An analysis of Italian Stock Market by Emanuele Bajo (2001)

Research conducted by Bajo shows the information role of abnormal trading volume on the Italian stock market. The result of this study is emerging that high volumes are associated with extra-returns even when information is subsequently released. Furthermore, checking for market reaction around the announcement date, it has been found no market response when the information release follows abnormal volumes. Abnormal volumes are able to carry some informative content and they are in addition able to predict future extra-returns. As an additional proof, a portfolio strategy has been tested. Using as a purchase signal an abnormal volume with no contemporaneous information related, a hypothetical investor would have earned almost a 40% abnormal returns in 22 months of trading.

Research conducted by Bajo has similarities that are using the technique of analyzing t-test. Then the both of study use abnormal return variable and abnormal trading volume. While the difference is this research



adds a variable the abnormal market capitalization to measure the reaction of the capital market. And the other difference is the population used in this study uses companies listed in the Pefindo25 Index, whereas in research conducted by Bajo described. 1.167 observations are related to 290 securities listed on the Milan Stock Exchange.

3. Capital Market Reaction on the Announcement of Oil Fuel Price Increase on the Stock Listed in LQ45 Index on November 1, 2014, by Stesia Juliana Liogu and Ivonne S. Saerang (2015)

Research conducted by Liogu and Saerang aims to see the capital market reaction to the announcement of an oil fuel price increase on November 1, 2014, on the stocks of LQ45 index. The results of this study indicating there are significant differences in abnormal returns, trading volume, and market capitalization, before and after the announcement of an oil fuel price increase on November 1, 2014, on shares of LQ45.

The similarity between research conducted by Liogu and Saerang with this research is the use of analysis method, i.e. t-test of the secondary data. Then the variables used to evaluate the reaction of the capital markets are also the same, there are abnormal return, trading volume, and market capitalization. The research conducted by Liogu and Saerang used the population of companies listed in the LQ45 Index, whereas this study used the population of companies listed in the Pefindo25 Index.

## **C. Conceptual Framework**

### **1. Effect of Tax Amnesty Announcement on Abnormal Return**

Tax Amnesty Act is one of economic policy that concern by investors. To find out this policy giving effect to the capital market, this study investigate the reaction on the stock market caused the announcement of tax amnesty. Investigates how the market reaction on the tax amnesty announcement in this study used the abnormal return. The market reaction is indicated by the price change of the relevant securities. The reaction can be measured by using the return as a value of price change or by using an abnormal return. Abnormal return is a return greater than normal return. If an event has informatiive content it will give an abnormal return to the market. Conversely, if an event has not informatiive content then it will not give an abnormal return. So, testing the tax amnesty give reaction to the capital market,it can be seen from there is a cumulative abnormal return or not in the period around the announcement.

### **2. Effect of Tax Amnesty Announcement on Abnormal Trading Volume**

To test whether an information affecting stock prices in the stock market, it can be seen from the abnormal trading volume. This is because the stock trading volume is one of the indicators used in fundamental analysis in the stock price valuation and an instrument that can be used to see the reaction of capital market to information through parameter movement of trading volume the stock in the market. According to Jones (2000), trading volume is

used as an indicator to view liquid or illiquid stocks in the capital market which is a reflection of the company's circumstances.

Rising trading volume is an increase in trading activity of investors in the stock exchange. Increasing the volume of demand and supply of a stock will give the greater impact on stock price fluctuations in the stock, and increasing the volume of stock trading shows the growth for the public demand that has an impact on rising prices or stock returns. To see the reaction of investors on the announcement is by looking there is a cumulative of abnormal trading volume of stock on the date around the implementation of the tax amnesty policy. In the event of a significant influence, the tax amnesty policy has an effect on the capital market.

### 3. Effect of Tax Amnesty Announcement on Abnormal Market Capitalization

The market price is the most easily determined prices because the market price is the price of a stock in the ongoing market. If the stock exchange market is closed, then the market price is the closing price. So, this is the market price that states the rise and fall of a stock. If the market price is multiplied by the number of shares issued (outstanding shares) it will get a market value commonly called market capitalization. The market capitalization value of the stocks of course varies according to market price changes. This market value is determined by the demand and supply of shares in the stock market (Hartono, 2005: 135).

If the tax amnesty announcement gives effect in the market, the investor will response and the stock price will fluctuate. Measure the market reaction by looking there is a cumulative abnormal market capitalization or not in the date around the announcement of the tax amnesty policy. If there is a significant change in market capitalization, the tax amnesty policy gives effect to the capital market. In this research, the effect will be investigated by the existence of cumulative abnormal market capitalization in the period around the Tax Amnesty announcement.

The relationship between tax amnesty, abnormal return, abnormal trading volume, and abnormal market capitalization are illustrated in the diagram below.

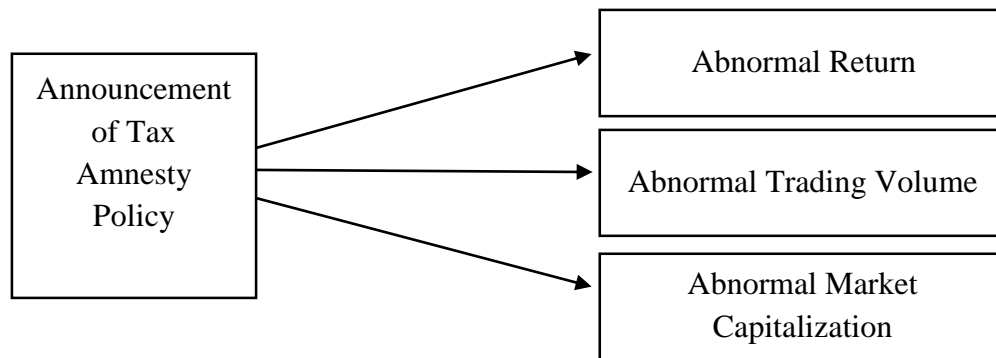


Figure 3.1: Schema Framework

#### **D. Research Hypothesis**

Erlina (2007: 41) states the hypothesis is a logical relationship between two or more variables in an empirically testable proposition. The hypothesis is a temporary answer to the problem formulation. Because it is temporary, it needs to be verified through empirical data collected. The starting point of the hypothesis

is the problem formulation. Based on the problem formulation and conceptual framework above, the hypothesis of this research are as follows.

H<sub>1</sub>: Cumulative abnormal return is existed on the stock of the companies listed in the Pefindo25 Index in the period around the announcement of tax amnesty.

H<sub>2</sub>: Cumulative abnormal trading volume is existed on the stock of the companies listed in the Pefindo25 Index in the period around the announcement of tax amnesty.

H<sub>3</sub>: Cumulative abnormal market capitalization is existed on the stock of the companies listed in the Pefindo25 Index in the period around the announcement of tax amnesty.

## **CHAPTER III RESEARCH METHODS**

### **A. Types of Research**

This research uses an event study approach. An event study is a study of market reaction to an event whose information is published as an announcement (Jogiyanto, 2000: 392). Samsul (2008: 273) defines event study as a study of the effect of an event on the market price, both at the time of the event and sometime after it happened.

### **B. The Place and Time of Research**

This research was conducted by taking the existing data (secondary data). These data are available on the official website of Indonesia Stock Exchange (IDX), namely [www.idx.co.id](http://www.idx.co.id) to download information about the companies listed in the Pefindo25 Index. Thus the data about stock price through the site [www.finance.yahoo.com](http://www.finance.yahoo.com), and the other relevant sources. This research has been conducted in November 2017 until January 2018.

### **C. Population and Sample of Research**

#### **1. Population of Research**

The population is a generalization region consisting of objects or subjects that have certain qualities and characteristics set by researchers to be studied and then make the conclusions (Sugiyono, 2011: 90). The population in this study are stocks of the companies listed in Pefindo25 Index period February 2016 - July 2016.

## 2. Sample of Research

According to Sugiyono (2011: 91) sample is part of the number and characteristics possessed by the population. The sample selection in this research using non-probability sampling technique with purposive sampling. Purposive sampling is a technique of sampling the source data with certain considerations or criteria. There are several characteristics of the sample, as follows.

- a. The companies are listed in the Pefindo25 Index for the period February 2016 - July 2016 and it is not in the process of deliberating during that period. Given that every February and August there are changes to the member of companies listed in the Pefindo25 Index.
- b. Have complete data during the period of February 2016 - July 2016. Determination of the observation period is a limitation of research to focus on the effects arising from the implementation of the Law of the Republic of Indonesia Number 11 of 2016 about Tax Amnesty.
- c. Not doing corporate action.

Based on these criteria, the following companies were selected as samples and research populations ([www.pefindo.com](http://www.pefindo.com)).

Table 3.1 List of Companies Registered in Pefindo25 Index Period February 2016 - July 2016

Number	Code	Stock List
1	ACES	Ace Hardware Indonesia Tbk
2	ACST	Acset Indonusa Tbk
3	ARNA	Arwana Citramulia
4	ASSA	Adi Sarana Armada Tbk
5	BEST	Bekasi Fajar Industrial Estate Tbk
6	BISI	BISI International Tbk
7	CSAP	Catur Sentosa Adiprana Tbk
8	ELSA	Elnusa Tbk
9	LINK	LINK Net Tbk
10	LPCK	Lippo Cikarang Tbk
11	LPPF	Matahari Department Store Tbk
12	MIKA	Mitra Keluarga Karya Sehat Tbk
13	MTDL	Metrodata Electronics Tbk
14	NRCA	Nusa Raya Cipta Tbk
15	RAJA	Rukun Raharja Tbk
16	RALS	Ramayana Lestari Sentosa Tbk
17	ROTI	Nippon Indosari Corpindo Tbk
18	SAME	Sarana Meditama Metropolitan Tbk
19	SCMA	Surya Citra Media Tbk
20	SIDO	Industri Jamu dan Farmasi Sido Muncul Tbk
21	SILO	Siloam Hospitals Tbk
22	SMBR	Semen Baturaja (Persero) Tbk
23	SMSM	Selamat Sempurna Tbk
24	TOTL	Total Bangun Persada Tbk
25	WTON	Wijaya Karya Beton Tbk

#### D. Operational Variable Definition

This study uses two types of variables, there are independent variable and dependent variable. Variable can be defined as attributes of a person or object that has variations from one person to another or one object with another object (Sugiyono, 2013: 38).



## 1. Independent variables

The independent variable is the variable that causes the change in the dependent variable (Sugiyono, 2013: 39). In other word, the independent variable is a variable that can affect other variables. Including the independent variable in this study is the announcement of the tax amnesty policy enforced by the House of Representatives on June 27, 2016 (then ratified by the President of the Republic of Indonesia on July 1, 2016) and effective from July 1, 2016 until March 31, 2017 divided into 3 periods: Period I from July 1, 2016, to September 30, 2016; Period II: from October 1, 2016, to December 31, 2016; and Period III: from January 1, 2017, to March 31, 2017.

The announcement of Tax Amnesty Law is predicted to influence the capital market. It is proven from the rising of composite stock price index in the capital market after the enactment of Tax Amensty policy. This research investigates the influence of tax amnesty announcement particularly on the stock of the companies listed in Pefindo25 Index.

## 2. Dependent variable

The dependent variable is the variable that is influenced or which become the result of an independent variable because of the independent variable (Sugiyono, 2013: 39). This research uses 3 (three) dependent variables as follows.

### a. Abnormal Return

Abnormal return is used as an evaluation of the results that can be given by a stock, where the value obtained shows investors' expectations of the actual results of stocks with the expected results of these stocks at a certain time. Abnormal return is the difference between the actual return with the expected return. In this study, abnormal return is measured by using the mean adjusted model. The step to calculate abnormal return are as follows (Jogiyanto, 2010: 415).

1) Calculate the Actual Return (R)

The calculation of actual return uses the difference in the current relative price to the previous price which is formulated as follows.

$$R_{i,t} = \frac{P_{i,t} - (P_{i,t-1})}{P_{i,t-1}}$$

Information:

$R_{i,t}$  = actual return of stock (i) on day t, in the window period

$P_{i,t}$  = stock price (i) on day t, in the window period

$P_{i,t-1}$  = stock price (i) before day t, in the window period

In this case, the stock price (i) is closing price at the time on day t.

2) Calculate the Expected Return (ER)

Return of expectation is estimated return from profit expected by the investor. This research uses the mean adjusted

model to measure the expected return. This model assumes that the expected return is consistent with the average of the previous realized return over the estimation period. The estimation period is the period before the window period. Therefore, the expected return is formulated as follows.

$$ER_{i,t} = \frac{E_{i,t} - (E_{i,t-1})}{E_{i,t-1}}$$

Information:

$ER_{i,t}$  = actual return of stock (i) on day t, in the estimation period

$E_{i,t}$  = stock price (i) on day t, in the estimation period

$E_{i,t-1}$  = stock price (i) before day t, in the estimation period

### 3) Calculate the Mean of Expected Return (MER)

After calculating the expected return, then find the mean of return in the estimation period and divided by the number of days in the estimation period.

$$MER_{i,t} = \frac{\sum_{i=t}^k R_{i,t}}{n}$$

$MER_{i,t}$  = mean of the expected return of stock (i) in the estimation period

$n$  = number of days in the estimation period

### 4) Calculate the Abnormal Return (AR)

Abnormal return is calculated from the difference between the actual return and the expected return, which is formulated as follows.

$$AR_{i,t} = R_{i,t} - MER_{i,t}$$

Information:

$AR_{i,t}$  = abnormal return of stock (i) on day t in the window period

$R_{i,t}$  = actual return of stock (i) on day t in the window period

$MER_{i,t}$  = mean of expected return on day t in the estimation period

b. Abnormal Trading Volume

Trading volume is an instrument that can be used to measure the level of stock trading activity in the stock exchange. According to Indarti (2011: 58), trading volume used to measure whether individual investors know the information issued by the company and use it in the purchase or sale of stocks, so it will obtain a gain above normal profit (abnormal return). Trading volume can also reflect how active and liquid a stock is traded in the stock market. Trading volume calculations can be conducted by comparing the number of stocks traded within a certain period with the total number of stocks outstanding companies within the same period. Measuring the market reaction, the research uses the cumulative of abnormal trading volume. The abnormal trading volume of a security i on

the day t is the ratio between the total volume traded over its 30 trading days mean (Bajo, 2001: 4).

- 1) Calculate the Trading Volume (TV) in the window period

$$TV_{i,t} = \frac{\sum \text{stock (i) traded on day t, in the window period}}{\sum \text{stock (i) listed on day t, in the window period}}$$

- 2) Calculate the Trading Volume (TV) in the estimation period

$$TV_{i,t} = \frac{\sum \text{stock (i) traded on day t, in the estimation period}}{\sum \text{stock (i) listed on day t, in the estimation period}}$$

- 3) Calculate the Mean of Trading volume (MTV)

Calculates the mean of the trading volume for all stocks per day during the estimation period.

$$MTV = \frac{\sum_{i=t}^k TV_{i,t}}{n}$$

Information:

MTV = mean of trading volume in the estimation period

$TV_{i,t}$  = trading volume stocks (i) on day t in the estimation period

n = number of days in the estimation period

- 4) Calculate the Abnormal Trading Volume (ATV)

Abnormal trading volume is calculated from the difference between the values of trading volume in the window period minus

the mean of trading volume in the estimation period, which is formulated as follows.

$$ATVi, t = TVi, t - MTV$$

Information:

$ATVi, t$  = abnormal trading volume of stock (i) on day t

$TVi, t$  = trading volume of stock (i) on day t

$MTV$  = mean of trading volume in the estimation period

c. Abnormal Market Capitalization

Market capitalization is the market price multiplied by the number of outstanding shares. Market capitalization is formulated as follows.

1) Calculate the Market Capitalization (MC) in the window period

$$MCi, t = Pi, t \times Si, t$$

Information:

$MCi, t$  = stock market value (i) on day t in the window period

$Pi, t$  = stock market price (i) on day t in the window period

$Si, t$  = number of shares issued in the window period

2) Calculate the Market Capitalization (MC) in the estimation period

$$MCi, t = Pi, t \times Si, t$$

Information:

$MCi, t$  = stock market value in the estimation period

$Pi, t$  = stock market price in the estimation period

$Si, t$  = number of shares issued in the estimation period

3) Calculate the Mean of Market Capitalization (MMC)

Calculates the average of market capitalization for all stocks per day during the estimation period.

$$MMC = \frac{\sum_{i=t}^k MC_{i,t}}{n}$$

Information:

MMC = mean of market capitalization in the estimation period

$MC_{i,t}$  = market capitalization stocks (i) on day t in the estimation period

n = number of days in the estimation period

4) Calculate the Abnormal Market Capitalization (AMC)

Abnormal market capitalization is calculated from the difference between the values of market capitalization in the window period minus the mean of market capitalization in the estimation period, which is formulated as follows.

$$AMC_{i,t} = MC_{i,t} - MMC$$

Information:

$AMC_{i,t}$  = abnormal market capitalization stock (i) on day t

$MC_{i,t}$  = market capitalization stock (i) on day t

MMC = mean of market capitalization in the estimation period

## **E. Data Collection Techniques**

Arikunto (2010: 265) states the collecting data is a way to obtain the required information about the variables in the research. According to Sugiyono (2013: 223) viewed from the data source, the data collection can use primary sources and secondary sources. The primary source is a source of data directly given to the researcher of the subject under study. While the secondary source is data obtained by researchers indirectly, can through other parties such as institutions or related institutions, library archives, and so on. Meanwhile, if viewed from the way of data collection techniques can be conducted through observation, interviews, questionnaires, or documentation.

Data collection method of this research is a documentation study method of obtaining secondary data. The data obtained in the form of time series data. It is data from a particular phenomenon that can be from a certain time interval, for example in time weekly, monthly, and yearly. The data are obtained through the website owned by BEI, namely <http://www.idx.co.id/> and company website. While the data of stock prices obtained from the site <https://finance.yahoo.com/>.

## **F. Data Analysis Techniques**

### **1. Descriptive Analysis of Research Data**

Descriptive analysis is intended to describe or provide an overview of the object under study through the sample data or population, without analyze and make conclusions generally accepted. There are many ways to presenting the data, namely regular tables, or distributions of frequency, graphs,



diagrams, pictograms, group explanations through mode, median, mean, and group variation through standard ranges and deviations (Sugiyono, 2007: 29).

This analysis provides an overview or descriptive of the data seen from the graph of changes in actual return and market share return during of various window period as well as changes in abnormal return, abnormal trading volume, and abnormal market capitalization. Descriptive statistical analysis was performed to determine the minimum, maximum, mean, and standard deviation for each variable during days of observation.

## 2. Hypothesis Testing 1

Hypothesis 1 is testing the hypothesis of cumulative abnormal return is existed in the period around tax amnesty announcement. In this study expected return is calculated using the mean adjusted model. To calculate abnormal returns, the steps are as described in the operational variable definitions. Then to test the hypothesis one which is states that there is a cumulative abnormal return in the period around the event used the statistical test. Step for this statistical test are as follows:

- a. Calculate the cumulative of abnormal return with the various window period (-5,+5), (-4,+4), (-3,+3), (-2,+2), and (-1,+1).
- b. Calculate t value (t-test) for the various window period.
- c. Determine criteria with the level of significance 1%  $\alpha = 0.01$  t table =  $\pm 2.358$ , 5%  $\alpha = 0.05$  t table =  $\pm 1.658$ , and 10%  $\alpha = 0.1$  t table =  $\pm 1.289$ .
  - 1)  $H_0$  supported if  $t_{table} < t < t_{table}$

2)  $H_0$  ignored if  $t > t_{table}$  or  $t < -t_{table}$

### 3. Hypothesis Testing 2

The hypothesis 2 is testing the hypothesis cumulative abnormal trading volume is existed in the period around the tax amnesty announcement, then using t-test. Step for this statistical test are as follows:

- a. Calculate the cumulative of abnormal trading volume with the various window period  $(-5,+5)$ ,  $(-4,+4)$ ,  $(-3,+3)$ ,  $(-2,+2)$ , and  $(-1,+1)$ .
- b. Calculate t value (t-test) for the various window period.
- c. Determine criteria with the level of significance 1%  $\alpha = 0.01$   $t_{table} = \pm 2.358$ , 5%  $\alpha = 0.05$   $t_{table} = \pm 1.658$ , and 10%  $\alpha = 0.1$   $t_{table} = \pm 1.289$ .
  - 1)  $H_0$  supported if  $-t_{table} < t < t_{table}$
  - 2)  $H_0$  ignored if  $t > t_{table}$  or  $t < -t_{table}$

### 4. Hypothesis Testing 3

The hypothesis 3 is testing the hypothesis of cumulative abnormal market capitalization is existed in the period around the tax amnesty announcement, then test using t-test. Step for this statistical test are as follows:

- a. Calculate the cumulative of abnormal market capitalization with various window period  $(-5,+5)$ ,  $(-4,+4)$ ,  $(-3,+3)$ ,  $(-2,+2)$ , and  $(-1,+1)$ .
- b. Calculate t value (t-test) for the various window period.
- c. Determine criteria with the level of significance 1%  $\alpha = 0.01$   $t_{table} = \pm 2.358$ , 5%  $\alpha = 0.05$   $t_{table} = \pm 1.658$ , and 10%  $\alpha = 0.1$   $t_{table} = \pm 1.289$ .

- 1)  $H_0$  supported if  $t_{table} < t < t_{table}$
- 2)  $H_0$  ignored if  $t > t_{table}$  or  $t < -t_{table}$

## CHAPTER IV

### RESEARCH RESULT AND DISCUSSION

#### A. Description of Research Data

The data about the cumulative list of abnormal return on shares of companies listed in the Pefindo25 Index in the various window period start from 11 days, 9 days, 7 days 5 days, and 3 days in the table below.

Table 4.1 Cumulative Abnormal Return for All Stock in the Various Window Period

Company	CAR (-5,+5)	CAR (-4,+4)	CAR (-3,+3)	CAR (-2,+2)	CAR (-1,+1)
ACES	0.068203	-0.013680	-0.054980	-0.066243	-0.079497
ACST	0.059448	-0.028073	0.025964	-0.003265	-0.010579
ARNA	0.043562	0.049823	-0.001933	0.029656	0.020058
ASSA	-0.112826	-0.106462	-0.082630	-0.032932	-0.052731
BEST	-0.036727	-0.049322	-0.017519	0.021855	0.001903
BISI	-0.007370	-0.003737	0.005387	0.009135	0.002258
CSAP	0.020240	0.027103	0.007119	0.022537	0.025319
ELSA	-0.030934	-0.028680	0.001097	0.021950	0.005586
LINK	0.011905	0.010588	0.004052	0.012503	0.009032
LPCK	0.032587	-0.012321	0.006658	0.041793	0.038144
LPPF	0.060220	0.039023	0.077917	0.015749	0.005784
MIKA	0.032220	0.028496	0.066925	0.046146	0.055045
MTDL	0.012634	0.000466	0.001649	-0.001094	0.011057
NRCA	0.053623	0.046535	0.040014	0.025237	0.002393
RAJA	0.044012	0.027663	-0.013486	-0.028845	0.040278
RALS	0.026474	-0.005232	-0.003146	0.046790	0.025181
ROTI	0.137707	0.070071	0.032546	0.062835	0.042046
SAME	0.038569	0.027647	0.013411	0.006131	0.016164
SCMA	0.001755	-0.016256	-0.006929	-0.009669	-0.009369
SIDO	-0.011650	-0.017108	-0.004667	-0.009933	-0.015636
SILO	-0.024657	0.009809	0.034912	0.052034	0.058810
SMBR	0.001697	-0.070333	-0.158936	-0.084391	-0.042173
SMSM	0.018525	0.006369	0.011029	0.007277	-0.005329
TOTL	0.136964	0.047874	0.058924	0.075263	0.015741
WTON	0.032915	0.017779	0.002968	0.003570	0.014274

The result of data processing is descriptive statistical of the various window period.

Table 4.2 Data Description of Cumulative Abnormal Return in the Various Window Period

Window Period	Minimum	Maximum	Mean	Std. Deviation
T(-5,+5)	-0.11	0.14	0.0244	0.05151
T(-4,+4)	-0.11	0.07	0.0023	0.03986
T(-3,+3)	-0.16	0.08	0.0019	0.04771
T(-2,+2)	-0.08	0.08	0.0106	0.03697
T(-1,+1)	-0.08	0.06	0.0070	0.03172

Based on the Table 4.2 it can be seen that the greatest of cumulative abnormal return is in the window period 11 days, namely 0.0244. The highest cumulative abnormal return is 0.14, in the 11 days window period. While the lowest cumulative abnormal return is -0.16, in the 7 days window period.

The data about the cumulative list of abnormal trading volume on shares of companies listed in the Pefindo25 Index in the various window period start from 11 days, 9 days, 7 days, 5 days, and 3 days in the table below.

Table 4.3 Cumulative Abnormal Trading Volume for All Stock in the Various  
Window Period

Company	CATV (-5,+5)	CATV (-4,+4)	CATV (-3,+3)	CATV (-2,+2)	CATV (-1,+1)
ACES	0.002003	0.001765	0.000997	0.000618	-0.000222
ACST	0.016522	0.010092	0.007081	0.005697	0.000621
ARNA	0.007438	0.005979	0.003007	0.003352	-0.000429
ASSA	0.002874	0.003336	0.003323	0.000147	-0.000830
BEST	0.047104	0.016787	0.009387	0.007450	0.003182
BISI	-0.001156	-0.001276	-0.001143	-0.000803	-0.000580
CSAP	0.001466	0.002750	0.002431	0.002042	0.000511
ELSA	0.003437	0.009335	-0.000618	-0.000141	-0.000347
LINK	0.004277	0.003747	0.002645	0.001748	0.001339
LPCK	0.006079	0.004738	0.003853	0.003717	0.001970
LPPF	0.005047	0.004486	0.001450	0.002165	0.001678
MIKA	0.000351	0.000619	0.000421	0.000152	0.000138
MTDL	-0.002014	-0.001619	-0.001362	-0.001017	-0.000620
NRCA	-0.002986	-0.002290	-0.001529	-0.000660	-0.000014
RAJA	-0.011755	-0.009798	-0.006134	-0.004875	-0.003602
RALS	0.009364	0.006668	0.004315	0.006009	0.003125
ROTI	0.003689	0.002638	0.002023	0.001995	0.001152
SAME	-0.000022	0.000073	0.000240	-0.000101	0.000137
SCMA	0.000204	-0.000209	-0.000421	-0.000173	-0.000077
SIDO	0.000873	0.000887	0.000358	0.000083	0.000065
SILO	-0.013864	-0.011392	-0.008926	-0.005041	-0.003263
SMBR	0.026767	0.018568	0.006079	0.000453	-0.002604
SMSM	-0.000019	0.000056	0.000210	0.000199	0.000005
TOTL	0.044448	0.031206	0.029354	0.028255	0.013350
WTON	0.009801	0.008921	0.009977	0.008635	0.005450

Table 4.4 Data Description of Cumulative Abnormal Trading Volume in the  
Various Window Period

Window Period	Minimum	Maximum	Mean	Std. Deviation
T(-5,+5)	-0.01	0.05	0.0064	0.01424
T(-4,+4)	-0.01	0.03	0.0042	0.00871
T(-3,+3)	-0.01	0.03	0.0027	0.00693
T(-2,+2)	-0.01	0.03	0.0024	0.00628
T(-1,+1)	0.00	0.01	0.0008	0.00325

Based on the Table 4.4 it can be seen that the greatest of cumulative abnormal trading volume is in the window period 11 days, namely 0.0064. The highest cumulative abnormal trading volume is 0.05, in the 11 days window period. While the lowest cumulative abnormal trading volume is -0.01, in the 5 days window period.

The data about the cumulative list of abnormal market capitalization on shares of companies listed in the Pefindo25 Index in the various window period start from 11 days, 9 days, 7 days 5 days, and 3 days in the table below.

Table 4.5 Cumulative Abnormal Market Capitalization for All Stock in the  
Various Window Period

Company	CAMC (-5,+5)	CAMC (-4,+4)	CAMC (-3,+3)	CAMC (-2,+2)	CAMC (-1,+1)
ACES	14508900000000	11644850000000	81805500000000	54022500000000	33957000000000
ACST	-836873309183	-724169071150	-485464833117	-351760595083	-197056357050
ARNA	151722906837	7341430976	-210454354645	-171300056107	-205560067328
ASSA	4983000000	4077000000	6568500000	9060000000	-5436000000
BEST	-58205443938	-51130749095	-24761431952	1607885192	-29906664565
BISI	6785000000000	5625000000000	4435000000000	3215000000000	1935000000000
CSAP	463563948978	398439481149	308996695801	235766122132	130111125103
ELSA	-284398216667	-282451950000	-207520683333	-96096916667	-21165650000
LINK	566947001885	751534397848	631856855411	420899831453	149089819816
LPCK	2882020000000	2343780000000	1892540000000	1354300000000	781260000000
LPPF	49419805881600	39698275478400	29612005315200	17993828160000	10387788364800
MIKA	20666895365333	17504535408000	14487682810667	10743293413333	7726440816000
MTDL	729358609601	583938743502	448988525163	318286683597	194515351305
NRCA	-103178678219	-104842850448	-118988314397	-95689903187	-59910200256
RAJA	682367707750	567937592250	420890816750	290152371250	200184750750
RALS	16668504000000	13915256000000	10878168000000	7876560000000	4626592000000
ROTI	5162192366667	3965920300000	2997429233333	2256719166667	1237610100000
SAME	992773333333	816560000000	593146666667	393333333333	264320000000
SCMA	3867413526393	3589603102947	3311792679501	2449118206695	1440227721549
SIDO	3467500000000	3232500000000	2772500000000	1862500000000	1027500000000
SILO	17094477934166	14496746373714	11630221563263	8509238464181	5275189011695
SMBR	9769142673117	7666502855050	5711428214483	4100672321417	2440728035850
SMSM	-144806692835	-132809452335	-102816351085	-69224077685	-43549983015
TOTL	2841666666667	2335850000000	1881183333333	1494716666667	937750000000
WTON	6408773106533	5386158358800	4276388945067	3166619531333	2013272784600



Table 4.6 Data Description of Cumulative Abnormal Market Capitalization in the Various Window Period

Window Period	Minimum	Maximum	Mean	Std. Deviation
T(-5,+5)	-836873309183	49419805881600	6432521987520.719	10936388536853.277
T(-4,+4)	-724169071150	39698275478400	5300179937984.320	8876290726972.250
T(-3,+3)	-485464833117	29612005315200	4111740007444.400	6742848249907.049
T(-2,+2)	-351760595083	17993828160000	2838234024340.839	4367694188643.247
T(-1,+1)	-205560067328	10387788364800	1734512278370.160	2686899181250.262

Based on the Table 4.6 it can be seen that the greatest of cumulative abnormal market capitalization is in the window period 11 days, namely 6432521987520.719. The highest cumulative abnormal market capitalization is 49419805881600, in the 11 days window period. While the lowest cumulative abnormal market capitalization is -836873309183, in the 11 days window period.

## B. Results of Hypothesis Test

### 1. Hypothesis Testing 1

Hypothesis 1 states that cumulative abnormal return is existed in the period around the tax amnesty announcement. To test whether there is an informative content of the tax amnesty announcement is conducted by looking at the cumulative abnormal return exist around the event and statistically it should not be equal to zero. Results calculation using t-test on abnormal return, it can be seen as follows:

Table 4.7 Cumulative Abnormal Return Test Result for Various Window Period

Window period	CAR	t	Notes
-5, +5	0.609096	2.365	Significant 1%
-4, +4	0.058042	0.291	Not Significant
-3, +3	0.046346	0.194	Not Significant
-2, +2	0.264089	1.429	Significant 10%
-1, +1	0.173759	1.096	Not Significant
T table 1% = $\pm 2.358$ , 5% = $\pm 1.658$ , and 10% = $\pm 1.289$ .			

From table 4.7, it can be seen that the cumulative abnormal return is significant in window period (-5, +5) at level 1% and window period (-2, +2) at level 10%. This indicates that on these window period, there is a cumulative abnormal return which proving that the announcement of tax amnesty has a useful informative content for investors. The abnormal return is significantly occurring at (-5, +5). This significance level supports hypothesis 1 that there is a significant market response to the tax amnesty announcement.

## 2. Hypothesis Testing 2

Hypothesis 2 in this research states that cumulative abnormal trading volume is existed in the period around the announcement of the tax amnesty policy.

Table 4.8 Cumulative Abnormal Trading Volume Test Result for Various Window Period

Window period	CATV	t	Notes
-5, +5	0.159928	2.246	Significant 5%
-4, +4	0.106068	2.435	Significant 1%
-3, +3	0.067019	1.933	Significant 5%
-2, +2	0.059904	1.908	Significant 5%
-1, +1	0.020136	1.237	Not Significant
T table 1% = $\pm 2.358$ , 5% = $\pm 1.658$ , and 10% = $\pm 1.289$ .			

Based on the table 4.8, there is a cumulative abnormal trading volume in almost various window period. The most significant level is in the window period (-4, +4) at level 1%. While, at the window period (-5, +5), (-3, +3), and (-2, +2) has significance level 5%. And for the window period (-1, +1) has no significant result. This study found cumulative trading volume in the various window period, so the hypothesis is supported.

### 3. Hypothesis Testing 3

Hypothesis 3 of this research states that the cumulative abnormal of market capitalization is existed in the period around of tax amnesty policy.

Table 4.9 Cumulative Abnormal Market Capitalization Test Result for Various Window Period

Window period	CAMC	t	Notes
-5, +5	160813049688019	2.941	Significant 1%
-4, +4	132504498449609	2.986	Significant 1%
-3, +3	102793500186109	3.049	Significant 1%
-2, +2	70955850608522	3.249	Significant 1%
-1, +1	43362806959254	3.228	Significant 1%
T table 1% = $\pm 2.358$ , 5% = $\pm 1.658$ , and 10% = $\pm 1.289$ .			

Based on the table 4.9, a whole of the various window period has a significant result at the same level, namely at level 1%. This result means that hypothesis 3 about the cumulative abnormal market capitalization in the period around the tax amnesty announcement is supported. It can be concluded that there is a significant market capitalization in the period around the

announcement of the tax amnesty act. This means that the market react to the announcement of tax amnesty act on shares listed in the Pefindo25 Index.

Based on the testing of each hypothesis, summary of the significant test result presented in the table 4.10.

Table 4.10 Summarize the Significant Result for Various Window Period

Window period	CAR	CATV	CAMC
-5, +5	Significant 1%	Significant 5%	Significant 1%
-4, +4	Not Significant	Significant 1%	Significant 1%
-3, +3	Not Significant	Significant 5%	Significant 1%
-2, +2	Significant 10%	Significant 5%	Significant 1%
-1, +1	Not Significant	Not Significant	Significant 1%

### C. Discussion

The results of research show that cumulative abnormal return, cumulative abnormal trading volume, and cumulative abnormal market capitalization were occurred in the period around the announcement of tax amnesty act among the stocks listed in Pefindo25 Index. For the case abnormal return, the window period that has significant result is (-5, +5) and (-2, +2), so hypothesis 1 states the existence of cumulative abnormal return is supported for the window period 11 days and 5 days. In the window period 3 days (-1,+1) the cumulative abnormal return is not existed. It can be occurred as there is information leakage about the announcement of tax amnesty. The investor in the capital market already knows about the information. Hence, the capital market does not react on the announcement of the tax amnesty law in window period 3 days.

While for the abnormal trading volume has a significant cumulative abnormal trading volume for a window period  $(-5, +5)$ ,  $(-4, +4)$ ,  $(-3, +3)$ , and  $(-1, +1)$ . The hypothesis 2 about there is a cumulative abnormal trading volume is supported for the window period 11 days, 9 days, 7 days, and 3 days. The hypothesis 3 which states the cumulative abnormal market capitalization in the period around the tax amnesty announcement is supported, indicated from the abnormal market capitalization has significant result for a whole various window period  $(-5, +5)$ ,  $(-4, +4)$ ,  $(-3, +3)$ ,  $(-2, +2)$  and  $(-1, +1)$ .

Based on testing the cumulative abnormal return, cumulative abnormal trading volume, and cumulative abnormal market capitalization majority have a significant result for the various window period. It means that the market react on the tax amnesty announcement and it has informative content to the investor. The tax amnesty announcement is a positive news for the investor as proved by the positive value of cumulative abnormal return, cumulative abnormal trading volume, and cumulative abnormal market capitalization. The various window period has a significant result, except for the short window period, namely 3, 7, and 9 days for the abnormal return and 3 days on the abnormal trading volume.

The results of this study indicate that the price of securities in the capital market works efficiently where the market receives relevant information in accordance with the Efficient Market Theory. Viewed in terms of companies sampled in this study that companies listed in Pefindo25 Index reflect that these companies are companies of good quality in receiving information and

announcement of tax amnesty on June 27, 2016, it gives a signal to the market according to Signal Theory (Signaling Theory).

The previous research supporting the results of this study was conducted by Wulandari, et al. (2017) which states there is a significant difference on abnormal return before and after the enactment of the Tax Amnesty Act. It is indicated by the results of significance tests on paired-sample t test with a significance value of 0.013. This means that the enactment of the Amnesty Tax Act gives a significant effect on the abnormal return. Then there is also the difference on the trading volume before and after the enactment of the Tax Amnesty Act. It is indicated by the result of test on paired-sample t test with significance value 0,020. This means that the enactment of the Amnesty Tax Act gives a significant effect on trading volume.

The results of this study are also in line with research conducted by Suryadi (2017) which showed that the average of abnormal return before and after the event was significantly different. The abnormal return increase after the event showed that the actual stock return obtained by investors is higher than the expected return. Wilcoxon Signed Ranks t-Test results show that average trading volume before and after the event differ significantly. It shows that the event has informative content and caused greater number of shares traded after the event.

For the companies listed in Pefindo25 Index, it is expected to maintain stability and increase stock returns and trading volume of shares with the enactment of the Amnesty Tax Law. Therefore, issuers should not focus on the

enactment of the Amnesty Tax Act, but how the company's performance can increase further after the enactment of the Amnesty Tax Act. So, investors can trust the issuer to provide a good prospect in the future. The company is expected to observe changes in stock prices continuously to be able to anticipate any changes in government policy.

On the other hand, the government is expected to be more careful in making policy both in the economic and non-economic as it can affect the trading in capital market. For investors, it is advisable to obtain as much information as possible and to review such information, especially information that may allegedly affect the capital market. The investors should be more sensitive to existing information, both economic and non-economic information as well as political and non-political information for reference in making investment decisions. Not all information in the capital market is valuable for investor. Therefore, capital market actors should be able to identify and analyze relevant information for its decision making. Investors are expected be more careful in selling or buying stocks and be more rational in decision making.

#### **D. Research Limitation**

Limitations in this study are as follows.

1. This study used a relatively short observation period (window period) namely in 11 days, 9 days, 7 days, 5 days, and 3 days. The estimation period is 30 days (30 days before window period).
2. This study used a limited sample namely 25 companies listed in the Pefindo25 Index.
3. The model to estimate the return only used mean adjusted model.
4. The indicators to measure the market reaction are limited to abnormal return, abnormal trading volume, and abnormal market capitalization.



## **CHAPTER V**

### **CONCLUSION AND SUGGESTIONS**

#### **A. Conclusion**

Based on the data analysis and the results of research discussions that have been described, the conclusions as follows.

1. The announcement of The Tax Amnesty Act has informative content for investors of the companies listed in the Pefindo25 Index for the period February-July 2016 as indicated by cumulative abnormal returns on the stocks during window period 11 days and 5 days.
2. There is a cumulative abnormal trading volume on the stock of the companies listed in the Pefindo25 Index in the period around the announcement of the tax amnesty policy, namely in 11 days, 9, days, 7 days, 5 days, and 3 days of window period.
3. There is a cumulative abnormal market capitalization in the companies' stocks listed in the Pefindo25 Index in the period around the announcement of the tax amnesty policy for a whole window period (-5, +5), (-4, +4), (-3, +3), (-2, +2), and (-1, +1).

#### **B. Suggestions**

Based on the research limitation, the suggestion of this research in terms of theoretical and practical as follows.

1. For Further Research

- a. It is necessary to extend the observation (window) period and the estimation period before the window period.
- b. Enlarge the sample and research data. The sample can use the stocks from certain sectors or certain index that registered in the capital market.
- c. The model for estimating returns can also use the market adjusted model or market model.
- d. Adding the other variables apart from abnormal return, abnormal trading volume, and abnormal market capitalization.

## 2. Relevant Stakeholder

- a. The government is expected to be more careful in making policy both in the economic and non-economic in the future as it can affect the trading in the capital market.
- b. The investors should be more sensitive to existing information, both economic and non-economic information as well as political and non-political information as a reference in making investment decisions
- c. The companies should not focus on the enactment of the Amnesty Tax Act, but how the company's performance can increase further after the enactment of the Amnesty Tax Act. The company is expected to observe changes in stock prices continuously to be able to anticipate any changes in government policy.

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# APPENDIX

## Appendix 1: The Calculation Results

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ACES	-36	805	6976500										
ACES	-35	800	3924700	17150000000	-0.006211	0.002831	-0.009043	0.000229	0.000213	0.000016	1372000000000	15160600000000	-1440600000000
ACES	-34	725	3094600	17150000000	-0.093750	0.002831	-0.096581	0.000180	0.000213	-0.000033	12433750000000	15160600000000	-2726850000000
ACES	-33	915	2598500	17150000000	0.262069	0.002831	0.259237	0.000152	0.000213	-0.000062	15692250000000	15160600000000	5316500000000
ACES	-32	875	4863600	17150000000	-0.043716	0.002831	-0.046547	0.000284	0.000213	0.000070	15006250000000	15160600000000	-1543500000000
ACES	-31	855	3467800	17150000000	-0.022857	0.002831	-0.025689	0.000202	0.000213	-0.000011	14663250000000	15160600000000	-4973500000000
ACES	-30	890	5543900	17150000000	0.040936	0.002831	0.038104	0.000323	0.000213	0.000110	15263500000000	15160600000000	1029000000000
ACES	-29	900	1565100	17150000000	0.011236	0.002831	0.008404	0.000091	0.000213	-0.000122	15435000000000	15160600000000	2744000000000
ACES	-28	860	3813900	17150000000	-0.044444	0.002831	-0.047276	0.000222	0.000213	0.000009	14749000000000	15160600000000	-4116000000000
ACES	-27	870	1912000	17150000000	0.011628	0.002831	0.008796	0.000111	0.000213	-0.000102	14920500000000	15160600000000	-2401000000000
ACES	-26	870	3607800	17150000000	0.000000	0.002831	-0.002831	0.000210	0.000213	-0.000003	14920500000000	15160600000000	-2401000000000
ACES	-25	860	6500700	17150000000	-0.011494	0.002831	-0.014326	0.000379	0.000213	0.000166	14749000000000	15160600000000	-4116000000000
ACES	-24	885	7080300	17150000000	0.029070	0.002831	0.026238	0.000413	0.000213	0.000200	15177750000000	15160600000000	17150000000
ACES	-23	880	3146500	17150000000	-0.005650	0.002831	-0.008481	0.000183	0.000213	-0.000030	15092000000000	15160600000000	-686000000000
ACES	-22	905	3844800	17150000000	0.028409	0.002831	0.025578	0.000224	0.000213	0.000011	15520750000000	15160600000000	3601500000000
ACES	-21	905	4613400	17150000000	0.000000	0.002831	-0.002831	0.000269	0.000213	0.000056	15520750000000	15160600000000	3601500000000
ACES	-20	830	5744600	17150000000	-0.082873	0.002831	-0.085704	0.000335	0.000213	0.000122	14234500000000	15160600000000	-9261000000000
ACES	-19	900	5208800	17150000000	0.084337	0.002831	0.081506	0.000304	0.000213	0.000091	15435000000000	15160600000000	2744000000000
ACES	-18	900	1904100	17150000000	0.000000	0.002831	-0.002831	0.000111	0.000213	-0.000102	15435000000000	15160600000000	2744000000000
ACES	-17	900	1046000	17150000000	0.000000	0.002831	-0.002831	0.000061	0.000213	-0.000152	15435000000000	15160600000000	2744000000000
ACES	-16	910	3627400	17150000000	0.011111	0.002831	0.008280	0.000212	0.000213	-0.000002	15606500000000	15160600000000	4459000000000
ACES	-15	925	6457000	17150000000	0.016484	0.002831	0.013652	0.000377	0.000213	0.000163	15863750000000	15160600000000	7031500000000



Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ACES	-14	925	6738900	17150000000	0.000000	0.002831	-0.002831	0.000393	0.000213	0.000180	15863750000000	15160600000000	703150000000
ACES	-13	920	2219000	17150000000	-0.005405	0.002831	-0.008237	0.000129	0.000213	-0.000084	15778000000000	15160600000000	617400000000
ACES	-12	940	3475900	17150000000	0.021739	0.002831	0.018908	0.000203	0.000213	-0.000010	16121000000000	15160600000000	960400000000
ACES	-11	925	2631000	17150000000	-0.015957	0.002831	-0.018789	0.000153	0.000213	-0.000060	15863750000000	15160600000000	703150000000
ACES	-10	900	2038800	17150000000	-0.027027	0.002831	-0.029859	0.000119	0.000213	-0.000094	15435000000000	15160600000000	274400000000
ACES	-9	880	1615900	17150000000	-0.022222	0.002831	-0.025054	0.000094	0.000213	-0.000119	15092000000000	15160600000000	-686000000000
ACES	-8	870	1052400	17150000000	-0.011364	0.002831	-0.014195	0.000061	0.000213	-0.000152	14920500000000	15160600000000	-240100000000
ACES	-7	920	1263900	17150000000	0.057471	0.002831	0.054640	0.000074	0.000213	-0.000139	15778000000000	15160600000000	617400000000
ACES	-6	880	5045100	17150000000	-0.043478	0.002831	-0.046310	0.000294	0.000213	0.000081	15092000000000	15160600000000	-686000000000
ACES	-5	975	4409900	17150000000	0.107955	0.002831	0.105123	0.000257	0.000213	0.000044	16721250000000	15160600000000	1560650000000
ACES	-4	990	1846000	17150000000	0.015385	0.002831	0.012553	0.000108	0.000213	-0.000105	16978500000000	15160600000000	1817900000000
ACES	-3	980	4576400	17150000000	-0.010101	0.002831	-0.012933	0.000267	0.000213	0.000054	16807000000000	15160600000000	1646400000000
ACES	-2	960	6477900	17150000000	-0.020408	0.002831	-0.023240	0.000378	0.000213	0.000165	16464000000000	15160600000000	1303400000000
ACES	-1	980	2417100	17150000000	0.020833	0.002831	0.018002	0.000141	0.000213	-0.000072	16807000000000	15160600000000	1646400000000
ACES	0	980	2268700	17150000000	0.000000	0.002831	-0.002831	0.000132	0.000213	-0.000081	16807000000000	15160600000000	1646400000000
ACES	1	890	2475000	17150000000	-0.091837	0.002831	-0.094668	0.000144	0.000213	-0.000069	15263500000000	15160600000000	1029000000000
ACES	2	925	1.5E+07	17150000000	0.039326	0.002831	0.036494	0.000888	0.000213	0.000675	15863750000000	15160600000000	703150000000
ACES	3	950	9234400	17150000000	0.027027	0.002831	0.024196	0.000538	0.000213	0.000325	16292500000000	15160600000000	1131900000000
ACES	4	980	1.9E+07	17150000000	0.031579	0.002831	0.028747	0.001087	0.000213	0.000874	16807000000000	15160600000000	1646400000000
ACES	5	960	6974700	17150000000	-0.020408	0.002831	-0.023240	0.000407	0.000213	0.000194	16464000000000	15160600000000	1303400000000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ACST	-36	3290	162418										
ACST	-35	3414	105	700000000	0.037680	-0.000552	0.038232	0.000000	0.000586	-0.000586	2389996020300	2338352119017	51643901283
ACST	-34	3414	0	700000000	0.000000	-0.000552	0.000552	0.000000	0.000586	-0.000586	2389996020300	2338352119017	51643901283
ACST	-33	3433	722336	700000000	0.005588	-0.000552	0.006140	0.001032	0.000586	0.000446	2403352074900	2338352119017	64999955883
ACST	-32	3433	0	700000000	0.000000	-0.000552	0.000552	0.000000	0.000586	-0.000586	2403352074900	2338352119017	64999955883
ACST	-31	3433	0	700000000	0.000000	-0.000552	0.000552	0.000000	0.000586	-0.000586	2403352074900	2338352119017	64999955883
ACST	-30	3338	10485	700000000	-0.027777	-0.000552	-0.027226	0.000015	0.000586	-0.000571	2336592993000	2338352119017	-1759126017
ACST	-29	3433	398444	700000000	0.028571	-0.000552	0.029123	0.000569	0.000586	-0.000017	2403352074900	2338352119017	64999955883
ACST	-28	3433	0	700000000	0.000000	-0.000552	0.000552	0.000000	0.000586	-0.000586	2403352074900	2338352119017	64999955883
ACST	-27	3433	0	700000000	0.000000	-0.000552	0.000552	0.000000	0.000586	-0.000586	2403352074900	2338352119017	64999955883
ACST	-26	3338	3984	700000000	-0.027777	-0.000552	-0.027226	0.000006	0.000586	-0.000580	2336592993000	2338352119017	-1759126017
ACST	-25	3338	23277	700000000	0.000000	-0.000552	0.000552	0.000033	0.000586	-0.000553	2336592993000	2338352119017	-1759126017
ACST	-24	3414	105	700000000	0.022855	-0.000552	0.023407	0.000000	0.000586	-0.000586	2389996020300	2338352119017	51643901283
ACST	-23	3338	5348	700000000	-0.022344	-0.000552	-0.021793	0.000008	0.000586	-0.000578	2336592993000	2338352119017	-1759126017
ACST	-22	3405	210022	700000000	0.020000	-0.000552	0.020552	0.000300	0.000586	-0.000286	2383325000000	2338352119017	44972880983
ACST	-21	3433	117121	700000000	0.008403	-0.000552	0.008955	0.000167	0.000586	-0.000419	2403352074900	2338352119017	64999955883
ACST	-20	3529	292751	700000000	0.027777	-0.000552	0.028329	0.000418	0.000586	-0.000168	2470110986000	2338352119017	131758866983
ACST	-19	3433	7445	700000000	-0.027027	-0.000552	-0.026475	0.000011	0.000586	-0.000575	2403352074900	2338352119017	64999955883
ACST	-18	3319	980696	700000000	-0.033335	-0.000552	-0.032783	0.001401	0.000586	0.000815	2323236938400	2338352119017	-15115180617
ACST	-17	3290	163676	700000000	-0.008620	-0.000552	-0.008069	0.000234	0.000586	-0.000352	2303210034300	2338352119017	-35142084717
ACST	-16	3290	34497	700000000	0.000000	-0.000552	0.000552	0.000049	0.000586	-0.000537	2303210034300	2338352119017	-35142084717
ACST	-15	3376	152877	700000000	0.026089	-0.000552	0.026640	0.000218	0.000586	-0.000367	2363297925100	2338352119017	24945806083
ACST	-14	3414	2440572	700000000	0.011297	-0.000552	0.011848	0.003487	0.000586	0.002901	2389996020300	2338352119017	51643901283
ACST	-13	3380	187500	700000000	-0.010040	-0.000552	-0.009489	0.000268	0.000586	-0.000318	2366000000000	2338352119017	27647880983

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ACST	-12	3310	14000	700000000	-0.020710	-0.000552	-0.020159	0.000020	0.000586	-0.000566	2317000000000	2338352119017	-21352119017
ACST	-11	3200	19900	700000000	-0.033233	-0.000552	-0.032681	0.000028	0.000586	-0.000557	2240000000000	2338352119017	-98352119017
ACST	-10	3160	31500	700000000	-0.012500	-0.000552	-0.011948	0.000045	0.000586	-0.000541	2212000000000	2338352119017	-126352119017
ACST	-9	3070	260000	700000000	-0.028481	-0.000552	-0.027929	0.000371	0.000586	-0.000214	2149000000000	2338352119017	-189352119017
ACST	-8	3130	1012400	700000000	0.019544	-0.000552	0.020095	0.001446	0.000586	0.000860	2191000000000	2338352119017	-147352119017
ACST	-7	3170	1737900	700000000	0.012780	-0.000552	0.013331	0.002483	0.000586	0.001897	2219000000000	2338352119017	-119352119017
ACST	-6	3110	3475400	700000000	-0.018927	-0.000552	-0.018376	0.004965	0.000586	0.004379	2177000000000	2338352119017	-161352119017
ACST	-5	3250	2862200	700000000	0.045016	-0.000552	0.045568	0.004089	0.000586	0.003503	2275000000000	2338352119017	-63352119017
ACST	-4	3200	2548900	700000000	-0.015385	-0.000552	-0.014833	0.003641	0.000586	0.003055	2240000000000	2338352119017	-98352119017
ACST	-3	3220	1638800	700000000	0.006250	-0.000552	0.006802	0.002341	0.000586	0.001755	2254000000000	2338352119017	-84352119017
ACST	-2	3260	3787700	700000000	0.012422	-0.000552	0.012974	0.005411	0.000586	0.004825	2282000000000	2338352119017	-56352119017
ACST	-1	3280	288700	700000000	0.006135	-0.000552	0.006686	0.000412	0.000586	-0.000173	2296000000000	2338352119017	-42352119017
ACST	0	3240	1145000	700000000	-0.012195	-0.000552	-0.011644	0.001636	0.000586	0.001050	2268000000000	2338352119017	-70352119017
ACST	1	3220	231100	700000000	-0.006173	-0.000552	-0.005621	0.000330	0.000586	-0.000256	2254000000000	2338352119017	-84352119017
ACST	2	3200	585900	700000000	-0.006211	-0.000552	-0.005660	0.000837	0.000586	0.000251	2240000000000	2338352119017	-98352119017
ACST	3	3270	150200	700000000	0.021875	-0.000552	0.022427	0.000215	0.000586	-0.000371	2289000000000	2338352119017	-49352119017
ACST	4	3140	379000	700000000	-0.039755	-0.000552	-0.039204	0.000541	0.000586	-0.000044	2198000000000	2338352119017	-140352119017
ACST	5	3270	2458900	700000000	0.041401	-0.000552	0.041953	0.003513	0.000586	0.002927	2289000000000	2338352119017	-49352119017

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ARNA	-36	575	12184100										
ARNA	-35	575	7166500	7341430976	0.000000	-0.000668	0.000668	0.000976	0.000389	0.000587	4221322811200	4387728579989	-166405768789
ARNA	-34	590	160300	7341430976	0.026087	-0.000668	0.026754	0.000022	0.000389	-0.000367	4331444275840	4387728579989	-56284304149
ARNA	-33	580	1093300	7341430976	-0.016949	-0.000668	-0.016282	0.000149	0.000389	-0.000240	4258029966080	4387728579989	-129698613909
ARNA	-32	580	3633900	7341430976	0.000000	-0.000668	0.000668	0.000495	0.000389	0.000106	4258029966080	4387728579989	-129698613909
ARNA	-31	590	522400	7341430976	0.017241	-0.000668	0.017909	0.000071	0.000389	-0.000318	4331444275840	4387728579989	-56284304149
ARNA	-30	590	264000	7341430976	0.000000	-0.000668	0.000668	0.000036	0.000389	-0.000353	4331444275840	4387728579989	-56284304149
ARNA	-29	595	2051900	7341430976	0.008475	-0.000668	0.009142	0.000279	0.000389	-0.000109	4368151430720	4387728579989	-19577149269
ARNA	-28	640	18107300	7341430976	0.075630	-0.000668	0.076298	0.002466	0.000389	0.002077	4698515824640	4387728579989	310787244651
ARNA	-27	640	1339700	7341430976	0.000000	-0.000668	0.000668	0.000182	0.000389	-0.000206	4698515824640	4387728579989	310787244651
ARNA	-26	635	1220300	7341430976	-0.007813	-0.000668	-0.007145	0.000166	0.000389	-0.000223	4661808669760	4387728579989	274080089771
ARNA	-25	615	232600	7341430976	-0.031496	-0.000668	-0.030829	0.000032	0.000389	-0.000357	4514980050240	4387728579989	127251470251
ARNA	-24	600	2978300	7341430976	-0.024390	-0.000668	-0.023723	0.000406	0.000389	0.000017	4404858585600	4387728579989	17130005611
ARNA	-23	595	3938000	7341430976	-0.008333	-0.000668	-0.007666	0.000536	0.000389	0.000147	4368151430720	4387728579989	-19577149269
ARNA	-22	605	4063100	7341430976	0.016807	-0.000668	0.017474	0.000553	0.000389	0.000164	4441565740480	4387728579989	53837160491
ARNA	-21	600	312900	7341430976	-0.008264	-0.000668	-0.007597	0.000043	0.000389	-0.000346	4404858585600	4387728579989	17130005611
ARNA	-20	580	6326400	7341430976	-0.033333	-0.000668	-0.032666	0.000862	0.000389	0.000473	4258029966080	4387728579989	-129698613909
ARNA	-19	595	1669300	7341430976	0.025862	-0.000668	0.026530	0.000227	0.000389	-0.000162	4368151430720	4387728579989	-19577149269
ARNA	-18	595	3195700	7341430976	0.000000	-0.000668	0.000668	0.000435	0.000389	0.000046	4368151430720	4387728579989	-19577149269
ARNA	-17	605	10546900	7341430976	0.016807	-0.000668	0.017474	0.001437	0.000389	0.001048	4441565740480	4387728579989	53837160491
ARNA	-16	600	889700	7341430976	-0.008264	-0.000668	-0.007597	0.000121	0.000389	-0.000268	4404858585600	4387728579989	17130005611
ARNA	-15	595	4135700	7341430976	-0.008333	-0.000668	-0.007666	0.000563	0.000389	0.000174	4368151430720	4387728579989	-19577149269
ARNA	-14	590	932800	7341430976	-0.008403	-0.000668	-0.007736	0.000127	0.000389	-0.000262	4331444275840	4387728579989	-56284304149
ARNA	-13	595	1527600	7341430976	0.008475	-0.000668	0.009142	0.000208	0.000389	-0.000181	4368151430720	4387728579989	-19577149269

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ARNA	-12	600	5885600	7341430976	0.008403	-0.000668	0.009071	0.000802	0.000389	0.000413	4404858585600	4387728579989	17130005611
ARNA	-11	595	355300	7341430976	-0.008333	-0.000668	-0.007666	0.000048	0.000389	-0.000341	4368151430720	4387728579989	-19577149269
ARNA	-10	590	1518800	7341430976	-0.008403	-0.000668	-0.007736	0.000207	0.000389	-0.000182	4331444275840	4387728579989	-56284304149
ARNA	-9	585	459100	7341430976	-0.008475	-0.000668	-0.007807	0.000063	0.000389	-0.000326	4294737120960	4387728579989	-92991459029
ARNA	-8	585	120300	7341430976	0.000000	-0.000668	0.000668	0.000016	0.000389	-0.000373	4294737120960	4387728579989	-92991459029
ARNA	-7	595	345000	7341430976	0.017094	-0.000668	0.017762	0.000047	0.000389	-0.000342	4368151430720	4387728579989	-19577149269
ARNA	-6	595	676800	7341430976	0.000000	-0.000668	0.000668	0.000092	0.000389	-0.000297	4368151430720	4387728579989	-19577149269
ARNA	-5	600	2935800	7341430976	0.008403	-0.000668	0.009071	0.000400	0.000389	0.000011	4404858585600	4387728579989	17130005611
ARNA	-4	600	2230000	7341430976	0.000000	-0.000668	0.000668	0.000304	0.000389	-0.000085	4404858585600	4387728579989	17130005611
ARNA	-3	595	503800	7341430976	-0.008333	-0.000668	-0.007666	0.000069	0.000389	-0.000320	4368151430720	4387728579989	-19577149269
ARNA	-2	590	1759700	7341430976	-0.008403	-0.000668	-0.007736	0.000240	0.000389	-0.000149	4331444275840	4387728579989	-56284304149
ARNA	-1	590	231800	7341430976	0.000000	-0.000668	0.000668	0.000032	0.000389	-0.000357	4331444275840	4387728579989	-56284304149
ARNA	0	575	3698100	7341430976	-0.025424	-0.000668	-0.024756	0.000504	0.000389	0.000115	4221322811200	4387728579989	-166405768789
ARNA	1	600	1484300	7341430976	0.043478	-0.000668	0.044146	0.000202	0.000389	-0.000187	4404858585600	4387728579989	17130005611
ARNA	2	610	31710000	7341430976	0.016667	-0.000668	0.017334	0.004319	0.000389	0.003930	4478272895360	4387728579989	90544315371
ARNA	3	595	2676500	7341430976	-0.024590	-0.000668	-0.023923	0.000365	0.000389	-0.000024	4368151430720	4387728579989	-19577149269
ARNA	4	625	25299000	7341430976	0.050420	-0.000668	0.051088	0.003446	0.000389	0.003057	4588394360000	4387728579989	200665780011
ARNA	5	615	13489200	7341430976	-0.016000	-0.000668	-0.015332	0.001837	0.000389	0.001448	4514980050240	4387728579989	127251470251

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ASSA	-36	115	5827500										
ASSA	-35	112	1029200	3397500000	-0.026087	0.011954	-0.038041	0.000303	0.000540	-0.000237	380520000000	390259500000	-9739500000
ASSA	-34	111	2375500	3397500000	-0.008929	0.011954	-0.020882	0.000699	0.000540	0.000160	377122500000	390259500000	-13137000000
ASSA	-33	111	1041700	3397500000	0.000000	0.011954	-0.011954	0.000307	0.000540	-0.000233	377122500000	390259500000	-13137000000
ASSA	-32	110	2002800	3397500000	-0.009009	0.011954	-0.020963	0.000589	0.000540	0.000050	373725000000	390259500000	-16534500000
ASSA	-31	112	421600	3397500000	0.018182	0.011954	0.006228	0.000124	0.000540	-0.000416	380520000000	390259500000	-9739500000
ASSA	-30	113	669600	3397500000	0.008929	0.011954	-0.003025	0.000197	0.000540	-0.000343	383917500000	390259500000	-6342000000
ASSA	-29	114	1382400	3397500000	0.008850	0.011954	-0.003104	0.000407	0.000540	-0.000133	387315000000	390259500000	-2944500000
ASSA	-28	115	1521700	3397500000	0.008772	0.011954	-0.003182	0.000448	0.000540	-0.000092	390712500000	390259500000	453000000
ASSA	-27	115	4567400	3397500000	0.000000	0.011954	-0.011954	0.001344	0.000540	0.000805	390712500000	390259500000	453000000
ASSA	-26	115	484700	3397500000	0.000000	0.011954	-0.011954	0.000143	0.000540	-0.000397	390712500000	390259500000	453000000
ASSA	-25	115	1675800	3397500000	0.000000	0.011954	-0.011954	0.000493	0.000540	-0.000046	390712500000	390259500000	453000000
ASSA	-24	116	1938800	3397500000	0.008696	0.011954	-0.003258	0.000571	0.000540	0.000031	394110000000	390259500000	3850500000
ASSA	-23	117	1248900	3397500000	0.008621	0.011954	-0.003333	0.000368	0.000540	-0.000172	397507500000	390259500000	7248000000
ASSA	-22	116	928600	3397500000	-0.008547	0.011954	-0.020501	0.000273	0.000540	-0.000266	394110000000	390259500000	3850500000
ASSA	-21	116	1842700	3397500000	0.000000	0.011954	-0.011954	0.000542	0.000540	0.000003	394110000000	390259500000	3850500000
ASSA	-20	116	2093000	3397500000	0.000000	0.011954	-0.011954	0.000616	0.000540	0.000076	394110000000	390259500000	3850500000
ASSA	-19	117	1419500	3397500000	0.008621	0.011954	-0.003333	0.000418	0.000540	-0.000122	397507500000	390259500000	7248000000
ASSA	-18	117	546800	3397500000	0.000000	0.011954	-0.011954	0.000161	0.000540	-0.000379	397507500000	390259500000	7248000000
ASSA	-17	117	883400	3397500000	0.000000	0.011954	-0.011954	0.000260	0.000540	-0.000280	397507500000	390259500000	7248000000
ASSA	-16	117	1588200	3397500000	0.000000	0.011954	-0.011954	0.000467	0.000540	-0.000072	397507500000	390259500000	7248000000
ASSA	-15	117	2329800	3397500000	0.000000	0.011954	-0.011954	0.000686	0.000540	0.000146	397507500000	390259500000	7248000000
ASSA	-14	115	1264800	3397500000	-0.017094	0.011954	-0.029048	0.000372	0.000540	-0.000167	390712500000	390259500000	453000000
ASSA	-13	116	1875500	3397500000	0.008696	0.011954	-0.003258	0.000552	0.000540	0.000012	394110000000	390259500000	3850500000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ASSA	-12	117	697500	3397500000	0.008621	0.011954	-0.003333	0.000205	0.000540	-0.000334	397507500000	390259500000	7248000000
ASSA	-11	118	11736400	3397500000	0.008547	0.011954	-0.003407	0.003454	0.000540	0.002915	400905000000	390259500000	10645500000
ASSA	-10	114	2643500	3397500000	-0.033898	0.011954	-0.045852	0.000778	0.000540	0.000238	387315000000	390259500000	-2944500000
ASSA	-9	114	1299800	3397500000	0.000000	0.011954	-0.011954	0.000383	0.000540	-0.000157	387315000000	390259500000	-2944500000
ASSA	-8	114	976900	3397500000	0.000000	0.011954	-0.011954	0.000288	0.000540	-0.000252	387315000000	390259500000	-2944500000
ASSA	-7	115	689700	3397500000	0.008772	0.011954	-0.003182	0.000203	0.000540	-0.000337	390712500000	390259500000	453000000
ASSA	-6	114	1827400	3397500000	-0.008696	0.011954	-0.020650	0.000538	0.000540	-0.000002	387315000000	390259500000	-2944500000
ASSA	-5	114	520500	3397500000	0.000000	0.011954	-0.011954	0.000153	0.000540	-0.000386	387315000000	390259500000	-2944500000
ASSA	-4	115	2334900	3397500000	0.008772	0.011954	-0.003182	0.000687	0.000540	0.000148	390712500000	390259500000	453000000
ASSA	-3	114	2808900	3397500000	-0.008696	0.011954	-0.020650	0.000827	0.000540	0.000287	387315000000	390259500000	-2944500000
ASSA	-2	117	2551900	3397500000	0.026316	0.011954	0.014362	0.000751	0.000540	0.000211	397507500000	390259500000	7248000000
ASSA	-1	114	513000	3397500000	-0.025641	0.011954	-0.037595	0.000151	0.000540	-0.000389	387315000000	390259500000	-2944500000
ASSA	0	114	90500	3397500000	0.000000	0.011954	-0.011954	0.000027	0.000540	-0.000513	387315000000	390259500000	-2944500000
ASSA	1	115	2076200	3397500000	0.008772	0.011954	-0.003182	0.000611	0.000540	0.000071	390712500000	390259500000	453000000
ASSA	2	117	4433700	3397500000	0.017391	0.011954	0.005437	0.001305	0.000540	0.000765	397507500000	390259500000	7248000000
ASSA	3	115	11648900	3397500000	-0.017094	0.011954	-0.029048	0.003429	0.000540	0.002889	390712500000	390259500000	453000000
ASSA	4	114	1377000	3397500000	-0.008696	0.011954	-0.020650	0.000405	0.000540	-0.000134	387315000000	390259500000	-2944500000
ASSA	5	116	1578500	3397500000	0.017544	0.011954	0.005590	0.000465	0.000540	-0.000075	394110000000	390259500000	3850500000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
BEST	-36	268	13016300										
BEST	-35	285	46219700	9647311150	0.063433	0.004953	0.058480	0.004791	0.003462	0.001329	2749483677750	2608311357922	141172319828
BEST	-34	281	18968800	9647311150	-0.014035	0.004953	-0.018988	0.001966	0.003462	-0.001496	2710894433150	2608311357922	102583075228
BEST	-33	281	0	9647311150	0.000000	0.004953	-0.004953	0.000000	0.003462	-0.003462	2710894433150	2608311357922	102583075228
BEST	-32	306	175000000	9647311150	0.088968	0.004953	0.084015	0.018140	0.003462	0.014678	2952077211900	2608311357922	343765853978
BEST	-31	276	12741300	9647311150	-0.098039	0.004953	-0.102992	0.001321	0.003462	-0.002141	2662657877400	2608311357922	54346519478
BEST	-30	268	0	9647311150	-0.028986	0.004953	-0.033938	0.000000	0.003462	-0.003462	2585479388200	2608311357922	-22831969722
BEST	-29	260	20569300	9647311150	-0.029851	0.004953	-0.034803	0.002132	0.003462	-0.001330	2508300899000	2608311357922	-100010458922
BEST	-28	266	10463800	9647311150	0.023077	0.004953	0.018124	0.001085	0.003462	-0.002377	2566184765900	2608311357922	-42126592022
BEST	-27	254	22967000	9647311150	-0.045113	0.004953	-0.050065	0.002381	0.003462	-0.001081	2450417032100	2608311357922	-157894325822
BEST	-26	254	26011200	9647311150	0.000000	0.004953	-0.004953	0.002696	0.003462	-0.000766	2450417032100	2608311357922	-157894325822
BEST	-25	250	20539200	9647311150	-0.015748	0.004953	-0.020701	0.002129	0.003462	-0.001333	2411827787500	2608311357922	-196483570422
BEST	-24	252	15018800	9647311150	0.008000	0.004953	0.003047	0.001557	0.003462	-0.001905	2431122409800	2608311357922	-177188948122
BEST	-23	274	48783400	9647311150	0.087302	0.004953	0.082349	0.005057	0.003462	0.001595	2643363255100	2608311357922	35051897178
BEST	-22	276	35668500	9647311150	0.007299	0.004953	0.002347	0.003697	0.003462	0.000235	2662657877400	2608311357922	54346519478
BEST	-21	272	25810900	9647311150	-0.014493	0.004953	-0.019445	0.002675	0.003462	-0.000786	2624068632800	2608311357922	15757274878
BEST	-20	264	74155100	9647311150	-0.029412	0.004953	-0.034364	0.007687	0.003462	0.004225	2546890143600	2608311357922	-61421214322
BEST	-19	282	71070600	9647311150	0.068182	0.004953	0.063229	0.007367	0.003462	0.003905	2720541744300	2608311357922	112230386378
BEST	-18	278	44551900	9647311150	-0.014184	0.004953	-0.019137	0.004618	0.003462	0.001156	2681952499700	2608311357922	73641141778
BEST	-17	272	22228600	9647311150	-0.021583	0.004953	-0.026535	0.002304	0.003462	-0.001158	2624068632800	2608311357922	15757274878
BEST	-16	276	30571600	9647311150	0.014706	0.004953	0.009753	0.003169	0.003462	-0.000293	2662657877400	2608311357922	54346519478
BEST	-15	274	70103200	9647311150	-0.007246	0.004953	-0.012199	0.007267	0.003462	0.003805	2643363255100	2608311357922	35051897178
BEST	-14	274	19719100	9647311150	0.000000	0.004953	-0.004953	0.002044	0.003462	-0.001418	2643363255100	2608311357922	35051897178
BEST	-13	274	12775900	9647311150	0.000000	0.004953	-0.004953	0.001324	0.003462	-0.002137	2643363255100	2608311357922	35051897178



Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
BEST	-12	270	20925800	9647311150	-0.014599	0.004953	-0.019551	0.002169	0.003462	-0.001293	2604774010500	2608311357922	-3537347422
BEST	-11	266	10115700	9647311150	-0.014815	0.004953	-0.019767	0.001049	0.003462	-0.002413	2566184765900	2608311357922	-42126592022
BEST	-10	258	27744400	9647311150	-0.030075	0.004953	-0.035028	0.002876	0.003462	-0.000586	2489006276700	2608311357922	-119305081222
BEST	-9	270	45938900	9647311150	0.046512	0.004953	0.041559	0.004762	0.003462	0.001300	2604774010500	2608311357922	-3537347422
BEST	-8	262	23721000	9647311150	-0.029630	0.004953	-0.034582	0.002459	0.003462	-0.001003	2527595521300	2608311357922	-80715836622
BEST	-7	270	35623400	9647311150	0.030534	0.004953	0.025582	0.003693	0.003462	0.000231	2604774010500	2608311357922	-3537347422
BEST	-6	266	13899900	9647311150	-0.014815	0.004953	-0.019767	0.001441	0.003462	-0.002021	2566184765900	2608311357922	-42126592022
BEST	-5	270	270090700	9647311150	0.015038	0.004953	0.010085	0.027996	0.003462	0.024535	2604774010500	2608311357922	-3537347422
BEST	-4	270	105706700	9647311150	0.000000	0.004953	-0.004953	0.010957	0.003462	0.007495	2604774010500	2608311357922	-3537347422
BEST	-3	264	68963300	9647311150	-0.022222	0.004953	-0.027175	0.007148	0.003462	0.003687	2546890143600	2608311357922	-61421214322
BEST	-2	268	60925900	9647311150	0.015152	0.004953	0.010199	0.006315	0.003462	0.002854	2585479388200	2608311357922	-22831969722
BEST	-1	274	39503200	9647311150	0.022388	0.004953	0.017436	0.004095	0.003462	0.000633	2643363255100	2608311357922	35051897178
BEST	0	262	55257700	9647311150	-0.043796	0.004953	-0.048748	0.005728	0.003462	0.002266	2527595521300	2608311357922	-80715836622
BEST	1	272	36129500	9647311150	0.038168	0.004953	0.033215	0.003745	0.003462	0.000283	2624068632800	2608311357922	15757274878
BEST	2	276	47042000	9647311150	0.014706	0.004953	0.009753	0.004876	0.003462	0.001414	2662657877400	2608311357922	54346519478
BEST	3	274	16513000	9647311150	-0.007246	0.004953	-0.012199	0.001712	0.003462	-0.001750	2643363255100	2608311357922	35051897178
BEST	4	268	53149800	9647311150	-0.021898	0.004953	-0.026850	0.005509	0.003462	0.002048	2585479388200	2608311357922	-22831969722
BEST	5	270	89176100	9647311150	0.007463	0.004953	0.002510	0.009244	0.003462	0.005782	2604774010500	2608311357922	-3537347422

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
BISI	-36	1570	1724200										
BISI	-35	1550	4987800	3000000000	-0.012739	0.001902	-0.014641	0.001663	0.000288	0.001375	4650000000000	5030000000000	-380000000000
BISI	-34	1580	63000	3000000000	0.019355	0.001902	0.017453	0.000021	0.000288	-0.000267	4740000000000	5030000000000	-290000000000
BISI	-33	1565	586800	3000000000	-0.009494	0.001902	-0.011396	0.000196	0.000288	-0.000092	4695000000000	5030000000000	-335000000000
BISI	-32	1550	2527500	3000000000	-0.009585	0.001902	-0.011487	0.000843	0.000288	0.000555	4650000000000	5030000000000	-380000000000
BISI	-31	1565	1622900	3000000000	0.009677	0.001902	0.007775	0.000541	0.000288	0.000253	4695000000000	5030000000000	-335000000000
BISI	-30	1550	211000	3000000000	-0.009585	0.001902	-0.011487	0.000070	0.000288	-0.000217	4650000000000	5030000000000	-380000000000
BISI	-29	1555	582800	3000000000	0.003226	0.001902	0.001324	0.000194	0.000288	-0.000093	4665000000000	5030000000000	-365000000000
BISI	-28	1545	211900	3000000000	-0.006431	0.001902	-0.008333	0.000071	0.000288	-0.000217	4635000000000	5030000000000	-395000000000
BISI	-27	1550	256000	3000000000	0.003236	0.001902	0.001334	0.000085	0.000288	-0.000202	4650000000000	5030000000000	-380000000000
BISI	-26	1570	204400	3000000000	0.012903	0.001902	0.011001	0.000068	0.000288	-0.000220	4710000000000	5030000000000	-320000000000
BISI	-25	1575	419800	3000000000	0.003185	0.001902	0.001283	0.000140	0.000288	-0.000148	4725000000000	5030000000000	-305000000000
BISI	-24	1610	418500	3000000000	0.022222	0.001902	0.020320	0.000140	0.000288	-0.000148	4830000000000	5030000000000	-200000000000
BISI	-23	1660	713000	3000000000	0.031056	0.001902	0.029154	0.000238	0.000288	-0.000050	4980000000000	5030000000000	-50000000000
BISI	-22	1700	1053100	3000000000	0.024096	0.001902	0.022194	0.000351	0.000288	0.000063	5100000000000	5030000000000	70000000000
BISI	-21	1720	336100	3000000000	0.011765	0.001902	0.009863	0.000112	0.000288	-0.000176	5160000000000	5030000000000	130000000000
BISI	-20	1750	1815000	3000000000	0.017442	0.001902	0.015540	0.000605	0.000288	0.000317	5250000000000	5030000000000	220000000000
BISI	-19	1745	594600	3000000000	-0.002857	0.001902	-0.004759	0.000198	0.000288	-0.000089	5235000000000	5030000000000	205000000000
BISI	-18	1715	97300	3000000000	-0.017192	0.001902	-0.019094	0.000032	0.000288	-0.000255	5145000000000	5030000000000	115000000000
BISI	-17	1690	150200	3000000000	-0.014577	0.001902	-0.016479	0.000050	0.000288	-0.000238	5070000000000	5030000000000	40000000000
BISI	-16	1740	449800	3000000000	0.029586	0.001902	0.027684	0.000150	0.000288	-0.000138	5220000000000	5030000000000	190000000000
BISI	-15	1775	1191200	3000000000	0.020115	0.001902	0.018213	0.000397	0.000288	0.000109	5325000000000	5030000000000	295000000000
BISI	-14	1800	1940500	3000000000	0.014085	0.001902	0.012182	0.000647	0.000288	0.000359	5400000000000	5030000000000	370000000000
BISI	-13	1800	877300	3000000000	0.000000	0.001902	-0.001902	0.000292	0.000288	0.000005	5400000000000	5030000000000	370000000000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
BISI	-12	1805	651000	3000000000	0.002778	0.001902	0.000876	0.000217	0.000288	-0.000071	5415000000000	5030000000000	385000000000
BISI	-11	1765	93200	3000000000	-0.022161	0.001902	-0.024063	0.000031	0.000288	-0.000257	5295000000000	5030000000000	265000000000
BISI	-10	1770	539600	3000000000	0.002833	0.001902	0.000931	0.000180	0.000288	-0.000108	5310000000000	5030000000000	280000000000
BISI	-9	1760	316200	3000000000	-0.005650	0.001902	-0.007552	0.000105	0.000288	-0.000182	5280000000000	5030000000000	250000000000
BISI	-8	1750	59300	3000000000	-0.005682	0.001902	-0.007584	0.000020	0.000288	-0.000268	5250000000000	5030000000000	220000000000
BISI	-7	1740	502300	3000000000	-0.005714	0.001902	-0.007616	0.000167	0.000288	-0.000120	5220000000000	5030000000000	190000000000
BISI	-6	1850	2416000	3000000000	0.063218	0.001902	0.061316	0.000805	0.000288	0.000518	5550000000000	5030000000000	520000000000
BISI	-5	1865	1786200	3000000000	0.008108	0.001902	0.006206	0.000595	0.000288	0.000308	5595000000000	5030000000000	565000000000
BISI	-4	1860	355800	3000000000	-0.002681	0.001902	-0.004583	0.000119	0.000288	-0.000169	5580000000000	5030000000000	550000000000
BISI	-3	1865	632800	3000000000	0.002688	0.001902	0.000786	0.000211	0.000288	-0.000077	5595000000000	5030000000000	565000000000
BISI	-2	1880	331900	3000000000	0.008043	0.001902	0.006141	0.000111	0.000288	-0.000177	5640000000000	5030000000000	610000000000
BISI	-1	1885	136300	3000000000	0.002660	0.001902	0.000757	0.000045	0.000288	-0.000242	5655000000000	5030000000000	625000000000
BISI	0	1895	269500	3000000000	0.005305	0.001902	0.003403	0.000090	0.000288	-0.000198	5685000000000	5030000000000	655000000000
BISI	1	1895	441900	3000000000	0.000000	0.001902	-0.001902	0.000147	0.000288	-0.000140	5685000000000	5030000000000	655000000000
BISI	2	1900	725000	3000000000	0.002639	0.001902	0.000736	0.000242	0.000288	-0.000046	5700000000000	5030000000000	670000000000
BISI	3	1895	74100	3000000000	-0.002632	0.001902	-0.004534	0.000025	0.000288	-0.000263	5685000000000	5030000000000	655000000000
BISI	4	1890	579100	3000000000	-0.002639	0.001902	-0.004541	0.000193	0.000288	-0.000095	5670000000000	5030000000000	640000000000
BISI	5	1875	972500	3000000000	-0.007937	0.001902	-0.009839	0.000324	0.000288	0.000037	5625000000000	5030000000000	595000000000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
CSAP	-36	429	10963129										
CSAP	-35	431	13813074	4053052920	0.004628	-0.000891	0.005520	0.003408	0.003642	-0.000234	1746342972799	1758887156726	-12544183926
CSAP	-34	445	16321657	4053052920	0.032260	-0.000891	0.033151	0.004027	0.003642	0.000385	1802680384069	1758887156726	43793227343
CSAP	-33	441	11653607	4053052920	-0.008930	-0.000891	-0.008039	0.002875	0.003642	-0.000767	1786581718667	1758887156726	27694561941
CSAP	-32	437	9842149	4053052920	-0.009009	-0.000891	-0.008117	0.002428	0.003642	-0.001214	1770487013097	1758887156726	11599856371
CSAP	-31	443	10624287	4053052920	0.013637	-0.000891	0.014528	0.002621	0.003642	-0.001021	1794631053394	1758887156726	35743896669
CSAP	-30	443	13806023	4053052920	0.000000	-0.000891	0.000891	0.003406	0.003642	-0.000236	1794631053394	1758887156726	35743896669
CSAP	-29	435	10456376	4053052920	-0.017937	-0.000891	-0.017045	0.002580	0.003642	-0.001062	1762441638202	1758887156726	3554481476
CSAP	-28	435	15318727	4053052920	0.000000	-0.000891	0.000891	0.003780	0.003642	0.000137	1762441638202	1758887156726	3554481476
CSAP	-27	435	11790695	4053052920	0.000000	-0.000891	0.000891	0.002909	0.003642	-0.000733	1762441638202	1758887156726	3554481476
CSAP	-26	441	10932005	4053052920	0.013697	-0.000891	0.014588	0.002697	0.003642	-0.000945	1786581718667	1758887156726	27694561941
CSAP	-25	431	10306093	4053052920	-0.022523	-0.000891	-0.021632	0.002543	0.003642	-0.001099	1746342972799	1758887156726	-12544183926
CSAP	-24	435	11151387	4053052920	0.009219	-0.000891	0.010110	0.002751	0.003642	-0.000891	1762441638202	1758887156726	3554481476
CSAP	-23	435	10701342	4053052920	0.000000	-0.000891	0.000891	0.002640	0.003642	-0.001002	1762441638202	1758887156726	3554481476
CSAP	-22	435	10245859	4053052920	0.000000	-0.000891	0.000891	0.002528	0.003642	-0.001114	1762441638202	1758887156726	3554481476
CSAP	-21	437	10893528	4053052920	0.004565	-0.000891	0.005456	0.002688	0.003642	-0.000955	1770487013097	1758887156726	11599856371
CSAP	-20	431	10697414	4053052920	-0.013637	-0.000891	-0.012746	0.002639	0.003642	-0.001003	1746342972799	1758887156726	-12544183926
CSAP	-19	433	10459902	4053052920	0.004609	-0.000891	0.005500	0.002581	0.003642	-0.001062	1754392307527	1758887156726	-4494849198
CSAP	-18	433	16713280	4053052920	0.000000	-0.000891	0.000891	0.004124	0.003642	0.000481	1754392307527	1758887156726	-4494849198
CSAP	-17	436	11106700	4053052920	0.007261	-0.000891	0.008152	0.002740	0.003642	-0.000902	1767131073120	1758887156726	8243916394
CSAP	-16	434	11094200	4053052920	-0.004587	-0.000891	-0.003696	0.002737	0.003642	-0.000905	1759024967280	1758887156726	137810554
CSAP	-15	430	12256600	4053052920	-0.009217	-0.000891	-0.008325	0.003024	0.003642	-0.000618	1742812755600	1758887156726	-16074401126
CSAP	-14	426	13373600	4053052920	-0.009302	-0.000891	-0.008411	0.003300	0.003642	-0.000343	1726600543920	1758887156726	-32286612806
CSAP	-13	434	17983000	4053052920	0.018779	-0.000891	0.019671	0.004437	0.003642	0.000795	1759024967280	1758887156726	137810554

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CSAP	-12	438	18720400	4053052920	0.009217	-0.000891	0.010108	0.004619	0.003642	0.000977	1775237178960	1758887156726	16350022234
CSAP	-11	428	31916000	4053052920	-0.022831	-0.000891	-0.021940	0.007875	0.003642	0.004232	1734706649760	1758887156726	-24180506966
CSAP	-10	428	29795400	4053052920	0.000000	-0.000891	0.000891	0.007351	0.003642	0.003709	1734706649760	1758887156726	-24180506966
CSAP	-9	420	28041200	4053052920	-0.018692	-0.000891	-0.017800	0.006919	0.003642	0.003276	1702282226400	1758887156726	-56604930326
CSAP	-8	426	26150600	4053052920	0.014286	-0.000891	0.015177	0.006452	0.003642	0.002810	1726600543920	1758887156726	-32286612806
CSAP	-7	428	15119200	4053052920	0.004695	-0.000891	0.005586	0.003730	0.003642	0.000088	1734706649760	1758887156726	-24180506966
CSAP	-6	438	11586100	4053052920	0.023364	-0.000891	0.024256	0.002859	0.003642	-0.000784	1775237178960	1758887156726	16350022234
CSAP	-5	442	10599400	4053052920	0.009132	-0.000891	0.010024	0.002615	0.003642	-0.001027	1791449390640	1758887156726	32562233914
CSAP	-4	440	18935900	4053052920	-0.004525	-0.000891	-0.003634	0.004672	0.003642	0.001030	1783343284800	1758887156726	24456128074
CSAP	-3	446	12072900	4053052920	0.013636	-0.000891	0.014528	0.002979	0.003642	-0.000664	1807661602320	1758887156726	48774445594
CSAP	-2	440	18800600	4053052920	-0.013453	-0.000891	-0.012562	0.004639	0.003642	0.000996	1783343284800	1758887156726	24456128074
CSAP	-1	442	17816800	4053052920	0.004545	-0.000891	0.005437	0.004396	0.003642	0.000754	1791449390640	1758887156726	32562233914
CSAP	0	442	16916200	4053052920	0.000000	-0.000891	0.000891	0.004174	0.003642	0.000531	1791449390640	1758887156726	32562233914
CSAP	1	450	11625800	4053052920	0.018100	-0.000891	0.018991	0.002868	0.003642	-0.000774	1823873814000	1758887156726	64986657274
CSAP	2	454	16929700	4053052920	0.008889	-0.000891	0.009780	0.004177	0.003642	0.000535	1840086025680	1758887156726	81198868954
CSAP	3	440	19028500	4053052920	-0.030837	-0.000891	-0.029946	0.004695	0.003642	0.001053	1783343284800	1758887156726	24456128074
CSAP	4	450	11880000	4053052920	0.022727	-0.000891	0.023618	0.002931	0.003642	-0.000711	1823873814000	1758887156726	64986657274
CSAP	5	442	13721800	4053052920	-0.017778	-0.000891	-0.016887	0.003386	0.003642	-0.000257	1791449390640	1758887156726	32562233914

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ELSA	-36	482	92925600										
ELSA	-35	472	66713000	7298500000	-0.020747	0.001252	-0.021999	0.009141	0.011062	-0.001921	3444892000000	3996901883333	-552009883333
ELSA	-34	470	57004200	7298500000	-0.004237	0.001252	-0.005489	0.007810	0.011062	-0.003252	3430295000000	3996901883333	-566606883333
ELSA	-33	478	65849800	7298500000	0.017021	0.001252	0.015769	0.009022	0.011062	-0.002040	3488683000000	3996901883333	-508218883333
ELSA	-32	486	177475900	7298500000	0.016736	0.001252	0.015484	0.024317	0.011062	0.013255	3547071000000	3996901883333	-449830883333
ELSA	-31	498	102587200	7298500000	0.024691	0.001252	0.023439	0.014056	0.011062	0.002994	3634653000000	3996901883333	-362248883333
ELSA	-30	515	181249200	7298500000	0.034137	0.001252	0.032885	0.024834	0.011062	0.013772	3758727500000	3996901883333	-238174383333
ELSA	-29	530	265581500	7298500000	0.029126	0.001252	0.027874	0.036389	0.011062	0.025327	3868205000000	3996901883333	-128696883333
ELSA	-28	505	61986500	7298500000	-0.047170	0.001252	-0.048422	0.008493	0.011062	-0.002569	3685742500000	3996901883333	-311159383333
ELSA	-27	550	164648100	7298500000	0.089109	0.001252	0.087857	0.022559	0.011062	0.011497	4014175000000	3996901883333	17273116667
ELSA	-26	525	22490100	7298500000	-0.045455	0.001252	-0.046706	0.003081	0.011062	-0.007980	3831712500000	3996901883333	-165189383333
ELSA	-25	510	55476900	7298500000	-0.028571	0.001252	-0.029823	0.007601	0.011062	-0.003461	3722235000000	3996901883333	-274666883333
ELSA	-24	585	274093000	7298500000	0.147059	0.001252	0.145807	0.037555	0.011062	0.026493	4269622500000	3996901883333	272720616667
ELSA	-23	590	15425500	7298500000	0.008547	0.001252	0.007295	0.002114	0.011062	-0.008948	4306115000000	3996901883333	309213116667
ELSA	-22	585	87679800	7298500000	-0.008475	0.001252	-0.009726	0.012013	0.011062	0.000951	4269622500000	3996901883333	272720616667
ELSA	-21	580	21564500	7298500000	-0.008547	0.001252	-0.009799	0.002955	0.011062	-0.008107	4233130000000	3996901883333	236228116667
ELSA	-20	595	84900200	7298500000	0.025862	0.001252	0.024610	0.011633	0.011062	0.000571	4342607500000	3996901883333	345705616667
ELSA	-19	580	35718900	7298500000	-0.025210	0.001252	-0.026462	0.004894	0.011062	-0.006168	4233130000000	3996901883333	236228116667
ELSA	-18	585	34226700	7298500000	0.008621	0.001252	0.007369	0.004690	0.011062	-0.006372	4269622500000	3996901883333	272720616667
ELSA	-17	580	22975300	7298500000	-0.008547	0.001252	-0.009799	0.003148	0.011062	-0.007914	4233130000000	3996901883333	236228116667
ELSA	-16	585	20780700	7298500000	0.008621	0.001252	0.007369	0.002847	0.011062	-0.008215	4269622500000	3996901883333	272720616667
ELSA	-15	600	98802600	7298500000	0.025641	0.001252	0.024389	0.013537	0.011062	0.002475	4379100000000	3996901883333	382198116667
ELSA	-14	595	86322000	7298500000	-0.008333	0.001252	-0.009585	0.011827	0.011062	0.000765	4342607500000	3996901883333	345705616667
ELSA	-13	580	73621700	7298500000	-0.025210	0.001252	-0.026462	0.010087	0.011062	-0.000975	4233130000000	3996901883333	236228116667

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ELSA	-12	575	57359900	7298500000	-0.008621	0.001252	-0.009873	0.007859	0.011062	-0.003203	4196637500000	3996901883333	199735616667
ELSA	-11	560	30846700	7298500000	-0.026087	0.001252	-0.027339	0.004226	0.011062	-0.006836	4087160000000	3996901883333	90258116667
ELSA	-10	535	45618000	7298500000	-0.044643	0.001252	-0.045895	0.006250	0.011062	-0.004812	3904697500000	3996901883333	-92204383333
ELSA	-9	550	62031200	7298500000	0.028037	0.001252	0.026785	0.008499	0.011062	-0.002563	4014175000000	3996901883333	17273116667
ELSA	-8	535	28389500	7298500000	-0.027273	0.001252	-0.028525	0.003890	0.011062	-0.007172	3904697500000	3996901883333	-92204383333
ELSA	-7	540	54619900	7298500000	0.009346	0.001252	0.008094	0.007484	0.011062	-0.003578	3941190000000	3996901883333	-55711883333
ELSA	-6	555	66029900	7298500000	0.027778	0.001252	0.026526	0.009047	0.011062	-0.002015	4050667500000	3996901883333	53765616667
ELSA	-5	550	57955300	7298500000	-0.009009	0.001252	-0.010261	0.007941	0.011062	-0.003121	4014175000000	3996901883333	17273116667
ELSA	-4	545	163422100	7298500000	-0.009091	0.001252	-0.010343	0.022391	0.011062	0.011329	3977682500000	3996901883333	-19219383333
ELSA	-3	530	71817000	7298500000	-0.027523	0.001252	-0.028775	0.009840	0.011062	-0.001222	3868205000000	3996901883333	-128696883333
ELSA	-2	540	86263200	7298500000	0.018868	0.001252	0.017616	0.011819	0.011062	0.000757	3941190000000	3996901883333	-55711883333
ELSA	-1	545	87048900	7298500000	0.009259	0.001252	0.008007	0.011927	0.011062	0.000865	3977682500000	3996901883333	-19219383333
ELSA	0	550	89714000	7298500000	0.009174	0.001252	0.007922	0.012292	0.011062	0.001230	4014175000000	3996901883333	17273116667
ELSA	1	545	62914900	7298500000	-0.009091	0.001252	-0.010343	0.008620	0.011062	-0.002442	3977682500000	3996901883333	-19219383333
ELSA	2	545	76707000	7298500000	0.000000	0.001252	-0.001252	0.010510	0.011062	-0.000552	3977682500000	3996901883333	-19219383333
ELSA	3	550	86174500	7298500000	0.009174	0.001252	0.007922	0.011807	0.011062	0.000745	4014175000000	3996901883333	17273116667
ELSA	4	540	70692900	7298500000	-0.018182	0.001252	-0.019434	0.009686	0.011062	-0.001376	3941190000000	3996901883333	-55711883333
ELSA	5	545	60465300	7298500000	0.009259	0.001252	0.008007	0.008285	0.011062	-0.002777	3977682500000	3996901883333	-19219383333

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
LINK	-36	4100	701600										
LINK	-35	4100	273900	3042649384	0.000000	0.001839	-0.001839	0.000090	0.000156	-0.000066	12474862474400	12719288641581	-244426167181
LINK	-34	4130	101600	3042649384	0.007317	0.001839	0.005478	0.000033	0.000156	-0.000123	12566141955920	12719288641581	-153146685661
LINK	-33	4100	645400	3042649384	-0.007264	0.001839	-0.009103	0.000212	0.000156	0.000056	12474862474400	12719288641581	-244426167181
LINK	-32	4200	763700	3042649384	0.024390	0.001839	0.022551	0.000251	0.000156	0.000095	12779127412800	12719288641581	59838771219
LINK	-31	4190	144700	3042649384	-0.002381	0.001839	-0.004220	0.000048	0.000156	-0.000109	12748700918960	12719288641581	29412277379
LINK	-30	4200	433500	3042649384	0.002387	0.001839	0.000547	0.000142	0.000156	-0.000014	12779127412800	12719288641581	59838771219
LINK	-29	4200	209100	3042649384	0.000000	0.001839	-0.001839	0.000069	0.000156	-0.000088	12779127412800	12719288641581	59838771219
LINK	-28	4160	144300	3042649384	-0.009524	0.001839	-0.011363	0.000047	0.000156	-0.000109	12657421437440	12719288641581	-61867204141
LINK	-27	4070	436300	3042649384	-0.021635	0.001839	-0.023474	0.000143	0.000156	-0.000013	12383582992880	12719288641581	-335705648701
LINK	-26	4200	818500	3042649384	0.031941	0.001839	0.030102	0.000269	0.000156	0.000113	12779127412800	12719288641581	59838771219
LINK	-25	4200	85900	3042649384	0.000000	0.001839	-0.001839	0.000028	0.000156	-0.000128	12779127412800	12719288641581	59838771219
LINK	-24	4220	58800	3042649384	0.004762	0.001839	0.002923	0.000019	0.000156	-0.000137	12839980400480	12719288641581	120691758899
LINK	-23	4250	36900	3042649384	0.007109	0.001839	0.005270	0.000012	0.000156	-0.000144	12931259882000	12719288641581	211971240419
LINK	-22	4220	1981700	3042649384	-0.007059	0.001839	-0.008898	0.000651	0.000156	0.000495	12839980400480	12719288641581	120691758899
LINK	-21	4220	226800	3042649384	0.000000	0.001839	-0.001839	0.000075	0.000156	-0.000082	12839980400480	12719288641581	120691758899
LINK	-20	4210	1314400	3042649384	-0.002370	0.001839	-0.004209	0.000432	0.000156	0.000276	12809553906640	12719288641581	90265265059
LINK	-19	4210	454800	3042649384	0.000000	0.001839	-0.001839	0.000149	0.000156	-0.000007	12809553906640	12719288641581	90265265059
LINK	-18	4220	822600	3042649384	0.002375	0.001839	0.000536	0.000270	0.000156	0.000114	12839980400480	12719288641581	120691758899
LINK	-17	4190	471000	3042649384	-0.007109	0.001839	-0.008948	0.000155	0.000156	-0.000001	12748700918960	12719288641581	29412277379
LINK	-16	4180	519100	3042649384	-0.002387	0.001839	-0.004226	0.000171	0.000156	0.000014	12718274425120	12719288641581	-1014216461
LINK	-15	4200	958300	3042649384	0.004785	0.001839	0.002945	0.000315	0.000156	0.000159	12779127412800	12719288641581	59838771219
LINK	-14	4190	517300	3042649384	-0.002381	0.001839	-0.004220	0.000170	0.000156	0.000014	12748700918960	12719288641581	29412277379
LINK	-13	4220	175900	3042649384	0.007160	0.001839	0.005321	0.000058	0.000156	-0.000098	12839980400480	12719288641581	120691758899



Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
LINK	-12	4200	232700	3042649384	-0.004739	0.001839	-0.006579	0.000076	0.000156	-0.000080	12779127412800	12719288641581	59838771219
LINK	-11	4200	776200	3042649384	0.000000	0.001839	-0.001839	0.000255	0.000156	0.000099	12779127412800	12719288641581	59838771219
LINK	-10	4190	465300	3042649384	-0.002381	0.001839	-0.004220	0.000153	0.000156	-0.000003	12748700918960	12719288641581	29412277379
LINK	-9	4160	483500	3042649384	-0.007160	0.001839	-0.008999	0.000159	0.000156	0.000003	12657421437440	12719288641581	-61867204141
LINK	-8	4160	103200	3042649384	0.000000	0.001839	-0.001839	0.000034	0.000156	-0.000122	12657421437440	12719288641581	-61867204141
LINK	-7	4150	275100	3042649384	-0.002404	0.001839	-0.004243	0.000090	0.000156	-0.000066	12626994943600	12719288641581	-92293697981
LINK	-6	4070	335400	3042649384	-0.019277	0.001839	-0.021116	0.000110	0.000156	-0.000046	12383582992880	12719288641581	-335705648701
LINK	-5	4100	672700	3042649384	0.007371	0.001839	0.005532	0.000221	0.000156	0.000065	12474862474400	12719288641581	-244426167181
LINK	-4	4190	1628300	3042649384	0.021951	0.001839	0.020112	0.000535	0.000156	0.000379	12748700918960	12719288641581	29412277379
LINK	-3	4170	1029500	3042649384	-0.004773	0.001839	-0.006612	0.000338	0.000156	0.000182	12687847931280	12719288641581	-31440710301
LINK	-2	4190	972100	3042649384	0.004796	0.001839	0.002957	0.000319	0.000156	0.000163	12748700918960	12719288641581	29412277379
LINK	-1	4190	1439400	3042649384	0.000000	0.001839	-0.001839	0.000473	0.000156	0.000317	12748700918960	12719288641581	29412277379
LINK	0	4150	2207800	3042649384	-0.009547	0.001839	-0.011386	0.000726	0.000156	0.000569	12626994943600	12719288641581	-92293697981
LINK	1	4250	1854100	3042649384	0.024096	0.001839	0.022257	0.000609	0.000156	0.000453	12931259882000	12719288641581	211971240419
LINK	2	4260	1223200	3042649384	0.002353	0.001839	0.000514	0.000402	0.000156	0.000246	12961686375840	12719288641581	242397734259
LINK	3	4260	2651700	3042649384	0.000000	0.001839	-0.001839	0.000872	0.000156	0.000715	12961686375840	12719288641581	242397734259
LINK	4	4210	2675700	3042649384	-0.011737	0.001839	-0.013576	0.000879	0.000156	0.000723	12809553906640	12719288641581	90265265059
LINK	5	4200	1890800	3042649384	-0.002375	0.001839	-0.004215	0.000621	0.000156	0.000465	12779127412800	12719288641581	59838771219

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
LPCK	-36	7025	1029900										
LPCK	-35	6800	0	696000000	-0.032028	-0.000345	-0.031683	0.000000	0.001333	-0.001333	4732800000000	4959580000000	-22678000000
LPCK	-34	7650	5427100	696000000	0.125000	-0.000345	0.125345	0.007798	0.001333	0.006465	5324400000000	4959580000000	36482000000
LPCK	-33	7400	2369000	696000000	-0.032680	-0.000345	-0.032334	0.003404	0.001333	0.002071	5150400000000	4959580000000	19082000000
LPCK	-32	7325	1851000	696000000	-0.010135	-0.000345	-0.009790	0.002659	0.001333	0.001327	5098200000000	4959580000000	13862000000
LPCK	-31	7100	964300	696000000	-0.030717	-0.000345	-0.030371	0.001385	0.001333	0.000053	4941600000000	4959580000000	-1798000000
LPCK	-30	7325	694400	696000000	0.031690	-0.000345	0.032035	0.000998	0.001333	-0.000335	5098200000000	4959580000000	13862000000
LPCK	-29	7175	363300	696000000	-0.020478	-0.000345	-0.020133	0.000522	0.001333	-0.000811	4993800000000	4959580000000	3422000000
LPCK	-28	6675	391100	696000000	-0.069686	-0.000345	-0.069341	0.000562	0.001333	-0.000771	4645800000000	4959580000000	-31378000000
LPCK	-27	6925	1040200	696000000	0.037453	-0.000345	0.037798	0.001495	0.001333	0.000162	4819800000000	4959580000000	-13978000000
LPCK	-26	6825	649300	696000000	-0.014440	-0.000345	-0.014095	0.000933	0.001333	-0.000400	4750200000000	4959580000000	-20938000000
LPCK	-25	6825	187000	696000000	0.000000	-0.000345	0.000345	0.000269	0.001333	-0.001064	4750200000000	4959580000000	-20938000000
LPCK	-24	6675	198700	696000000	-0.021978	-0.000345	-0.021633	0.000285	0.001333	-0.001047	4645800000000	4959580000000	-31378000000
LPCK	-23	7100	951400	696000000	0.063670	-0.000345	0.064016	0.001367	0.001333	0.000034	4941600000000	4959580000000	-1798000000
LPCK	-22	7000	356300	696000000	-0.014085	-0.000345	-0.013739	0.000512	0.001333	-0.000821	4872000000000	4959580000000	-8758000000
LPCK	-21	7125	416800	696000000	0.017857	-0.000345	0.018202	0.000599	0.001333	-0.000734	4959000000000	4959580000000	-58000000
LPCK	-20	7225	1204600	696000000	0.014035	-0.000345	0.014380	0.001731	0.001333	0.000398	5028600000000	4959580000000	6902000000
LPCK	-19	7225	735600	696000000	0.000000	-0.000345	0.000345	0.001057	0.001333	-0.000276	5028600000000	4959580000000	6902000000
LPCK	-18	7200	151300	696000000	-0.003460	-0.000345	-0.003115	0.000217	0.001333	-0.001116	5011200000000	4959580000000	5162000000
LPCK	-17	7200	186800	696000000	0.000000	-0.000345	0.000345	0.000268	0.001333	-0.001065	5011200000000	4959580000000	5162000000
LPCK	-16	7200	251000	696000000	0.000000	-0.000345	0.000345	0.000361	0.001333	-0.000972	5011200000000	4959580000000	5162000000
LPCK	-15	7125	799200	696000000	-0.010417	-0.000345	-0.010071	0.001148	0.001333	-0.000185	4959000000000	4959580000000	-58000000
LPCK	-14	7200	503300	696000000	0.010526	-0.000345	0.010872	0.000723	0.001333	-0.000610	5011200000000	4959580000000	5162000000
LPCK	-13	7025	957600	696000000	-0.024306	-0.000345	-0.023960	0.001376	0.001333	0.000043	4889400000000	4959580000000	-7018000000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
LPCK	-12	7200	900600	696000000	0.024911	-0.000345	0.025256	0.001294	0.001333	-0.000039	5011200000000	4959580000000	5162000000
LPCK	-11	7125	412600	696000000	-0.010417	-0.000345	-0.010071	0.000593	0.001333	-0.000740	4959000000000	4959580000000	-58000000
LPCK	-10	7100	331100	696000000	-0.003509	-0.000345	-0.003163	0.000476	0.001333	-0.000857	4941600000000	4959580000000	-1798000000
LPCK	-9	7175	298800	696000000	0.010563	-0.000345	0.010909	0.000429	0.001333	-0.000904	4993800000000	4959580000000	3422000000
LPCK	-8	7100	1877500	696000000	-0.010453	-0.000345	-0.010108	0.002698	0.001333	0.001365	4941600000000	4959580000000	-1798000000
LPCK	-7	7400	1829000	696000000	0.042254	-0.000345	0.042599	0.002628	0.001333	0.001295	5150400000000	4959580000000	19082000000
LPCK	-6	7350	1532200	696000000	-0.006757	-0.000345	-0.006411	0.002201	0.001333	0.000869	5115600000000	4959580000000	15602000000
LPCK	-5	7475	1747700	696000000	0.017007	-0.000345	0.017352	0.002511	0.001333	0.001178	5202600000000	4959580000000	24302000000
LPCK	-4	7550	1353500	696000000	0.010033	-0.000345	0.010379	0.001945	0.001333	0.000612	5254800000000	4959580000000	29522000000
LPCK	-3	7450	1256600	696000000	-0.013245	-0.000345	-0.012900	0.001805	0.001333	0.000473	5185200000000	4959580000000	22562000000
LPCK	-2	7325	1302200	696000000	-0.016779	-0.000345	-0.016433	0.001871	0.001333	0.000538	5098200000000	4959580000000	13862000000
LPCK	-1	7425	1525700	696000000	0.013652	-0.000345	0.013997	0.002192	0.001333	0.000859	5167800000000	4959580000000	20822000000
LPCK	0	7475	1643300	696000000	0.006734	-0.000345	0.007079	0.002361	0.001333	0.001028	5202600000000	4959580000000	24302000000
LPCK	1	7600	985100	696000000	0.016722	-0.000345	0.017068	0.001415	0.001333	0.000082	5289600000000	4959580000000	33002000000
LPCK	2	7750	1769500	696000000	0.019737	-0.000345	0.020082	0.002542	0.001333	0.001209	5394000000000	4959580000000	43442000000
LPCK	3	7575	693200	696000000	-0.022581	-0.000345	-0.022235	0.000996	0.001333	-0.000337	5272200000000	4959580000000	31262000000
LPCK	4	7350	1117800	696000000	-0.029703	-0.000345	-0.029358	0.001606	0.001333	0.000273	5115600000000	4959580000000	15602000000
LPCK	5	7550	1041000	696000000	0.027211	-0.000345	0.027556	0.001496	0.001333	0.000163	5254800000000	4959580000000	29522000000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
LPPF	-36	18000	1842000										
LPPF	-35	18000	2927300	2917918080	0.000000	0.000850	-0.000850	0.001003	0.001401	-0.000398	52522525440000	54555341702400	-2032816262400
LPPF	-34	19100	9101600	2917918080	0.061111	0.000850	0.060261	0.003119	0.001401	0.001718	55732235328000	54555341702400	1176893625600
LPPF	-33	17950	2997500	2917918080	-0.060209	0.000850	-0.061059	0.001027	0.001401	-0.000374	52376629536000	54555341702400	-2178712166400
LPPF	-32	17950	0	2917918080	0.000000	0.000850	-0.000850	0.000000	0.001401	-0.001401	52376629536000	54555341702400	-2178712166400
LPPF	-31	18000	2933700	2917918080	0.002786	0.000850	0.001936	0.001005	0.001401	-0.000396	52522525440000	54555341702400	-2032816262400
LPPF	-30	17725	8279100	2917918080	-0.015278	0.000850	-0.016127	0.002837	0.001401	0.001436	51720097968000	54555341702400	-2835243734400
LPPF	-29	17700	3825300	2917918080	-0.001410	0.000850	-0.002260	0.001311	0.001401	-0.000090	51647150016000	54555341702400	-2908191686400
LPPF	-28	17900	1196500	2917918080	0.011299	0.000850	0.010450	0.000410	0.001401	-0.000991	52230733632000	54555341702400	-2324608070400
LPPF	-27	18800	11590800	2917918080	0.050279	0.000850	0.049430	0.003972	0.001401	0.002571	54856859904000	54555341702400	301518201600
LPPF	-26	18275	4420300	2917918080	-0.027926	0.000850	-0.028775	0.001515	0.001401	0.000114	53324952912000	54555341702400	-1230388790400
LPPF	-25	19000	2009000	2917918080	0.039672	0.000850	0.038822	0.000689	0.001401	-0.000713	55440443520000	54555341702400	885101817600
LPPF	-24	19000	0	2917918080	0.000000	0.000850	-0.000850	0.000000	0.001401	-0.001401	55440443520000	54555341702400	885101817600
LPPF	-23	18600	4295600	2917918080	-0.021053	0.000850	-0.021902	0.001472	0.001401	0.000071	54273276288000	54555341702400	-282065414400
LPPF	-22	18800	4094800	2917918080	0.010753	0.000850	0.009903	0.001403	0.001401	0.000002	54856859904000	54555341702400	301518201600
LPPF	-21	18650	2667500	2917918080	-0.007979	0.000850	-0.008828	0.000914	0.001401	-0.000487	54419172192000	54555341702400	-136169510400
LPPF	-20	18975	8284700	2917918080	0.017426	0.000850	0.016577	0.002839	0.001401	0.001438	55367495568000	54555341702400	812153865600
LPPF	-19	18850	2155100	2917918080	-0.006588	0.000850	-0.007437	0.000739	0.001401	-0.000662	55002755808000	54555341702400	447414105600
LPPF	-18	19075	4597500	2917918080	0.011936	0.000850	0.011087	0.001576	0.001401	0.000175	55659287376000	54555341702400	1103945673600
LPPF	-17	18975	2656300	2917918080	-0.005242	0.000850	-0.006092	0.000910	0.001401	-0.000491	55367495568000	54555341702400	812153865600
LPPF	-16	19250	2957700	2917918080	0.014493	0.000850	0.013643	0.001014	0.001401	-0.000387	56169923040000	54555341702400	1614581337600
LPPF	-15	19250	6204500	2917918080	0.000000	0.000850	-0.000850	0.002126	0.001401	0.000725	56169923040000	54555341702400	1614581337600
LPPF	-14	18775	6079400	2917918080	-0.024675	0.000850	-0.025525	0.002083	0.001401	0.000682	54783911952000	54555341702400	228570249600
LPPF	-13	18900	4066000	2917918080	0.006658	0.000850	0.005808	0.001393	0.001401	-0.000008	55148651712000	54555341702400	593310009600

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
LPPF	-12	19125	3046700	2917918080	0.011905	0.000850	0.011055	0.001044	0.001401	-0.000357	55805183280000	54555341702400	1249841577600
LPPF	-11	18800	3425600	2917918080	-0.016993	0.000850	-0.017843	0.001174	0.001401	-0.000227	54856859904000	54555341702400	301518201600
LPPF	-10	18750	1713400	2917918080	-0.002660	0.000850	-0.003509	0.000587	0.001401	-0.000814	54710964000000	54555341702400	155622297600
LPPF	-9	18950	4302100	2917918080	0.010667	0.000850	0.009817	0.001474	0.001401	0.000073	55294547616000	54555341702400	739205913600
LPPF	-8	19000	2901100	2917918080	0.002639	0.000850	0.001789	0.000994	0.001401	-0.000407	55440443520000	54555341702400	885101817600
LPPF	-7	19250	4389000	2917918080	0.013158	0.000850	0.012308	0.001504	0.001401	0.000103	56169923040000	54555341702400	1614581337600
LPPF	-6	19525	5523700	2917918080	0.014286	0.000850	0.013436	0.001893	0.001401	0.000492	56972350512000	54555341702400	2417008809600
LPPF	-5	19925	3495600	2917918080	0.020487	0.000850	0.019637	0.001198	0.001401	-0.000203	58139517744000	54555341702400	3584176041600
LPPF	-4	20100	4779700	2917918080	0.008783	0.000850	0.007933	0.001638	0.001401	0.000237	58650153408000	54555341702400	4094811705600
LPPF	-3	19625	3943700	2917918080	-0.023632	0.000850	-0.024482	0.001352	0.001401	-0.000049	57264142320000	54555341702400	2708800617600
LPPF	-2	20000	5432500	2917918080	0.019108	0.000850	0.018259	0.001862	0.001401	0.000461	58358361600000	54555341702400	3803019897600
LPPF	-1	20000	5396700	2917918080	0.000000	0.000850	-0.000850	0.001850	0.001401	0.000448	58358361600000	54555341702400	3803019897600
LPPF	0	19500	7341500	2917918080	-0.025000	0.000850	-0.025850	0.002516	0.001401	0.001115	56899402560000	54555341702400	2344060857600
LPPF	1	20150	4423400	2917918080	0.033333	0.000850	0.032484	0.001516	0.001401	0.000115	58796049312000	54555341702400	4240707609600
LPPF	2	20000	4162700	2917918080	-0.007444	0.000850	-0.008294	0.001427	0.001401	0.000026	58358361600000	54555341702400	3803019897600
LPPF	3	21750	2148200	2917918080	0.087500	0.000850	0.086650	0.000736	0.001401	-0.000665	63464718240000	54555341702400	8909376537600
LPPF	4	20750	12253400	2917918080	-0.045977	0.000850	-0.046827	0.004199	0.001401	0.002798	60546800160000	54555341702400	5991458457600
LPPF	5	20800	6316700	2917918080	0.002410	0.000850	0.001560	0.002165	0.001401	0.000764	60692696064000	54555341702400	6137354361600

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
MIKA	-36	2500	17535200										
MIKA	-35	2480	9832700	14550736000	-0.008000	0.000730	-0.008730	0.000676	0.000490	0.000185	36085825280000	37487546181333	-1401720901333
MIKA	-34	2470	10953500	14550736000	-0.004032	0.000730	-0.004762	0.000753	0.000490	0.000262	35940317920000	37487546181333	-1547228261333
MIKA	-33	2520	8212600	14550736000	0.020243	0.000730	0.019513	0.000564	0.000490	0.000074	36667854720000	37487546181333	-819691461333
MIKA	-32	2600	11417300	14550736000	0.031746	0.000730	0.031016	0.000785	0.000490	0.000294	37831913600000	37487546181333	344367418667
MIKA	-31	2550	7962100	14550736000	-0.019231	0.000730	-0.019960	0.000547	0.000490	0.000057	37104376800000	37487546181333	-383169381333
MIKA	-30	2580	7216400	14550736000	0.011765	0.000730	0.011035	0.000496	0.000490	0.000006	37540898880000	37487546181333	53352698667
MIKA	-29	2550	8462100	14550736000	-0.011628	0.000730	-0.012358	0.000582	0.000490	0.000091	37104376800000	37487546181333	-383169381333
MIKA	-28	2800	7019900	14550736000	0.098039	0.000730	0.097310	0.000482	0.000490	-0.000008	40742060800000	37487546181333	3254514618667
MIKA	-27	2560	6127000	14550736000	-0.085714	0.000730	-0.086444	0.000421	0.000490	-0.000069	37249884160000	37487546181333	-237662021333
MIKA	-26	2600	7454000	14550736000	0.015625	0.000730	0.014895	0.000512	0.000490	0.000022	37831913600000	37487546181333	344367418667
MIKA	-25	2590	7876800	14550736000	-0.003846	0.000730	-0.004576	0.000541	0.000490	0.000051	37686406240000	37487546181333	198860058667
MIKA	-24	2580	7815200	14550736000	-0.003861	0.000730	-0.004591	0.000537	0.000490	0.000047	37540898880000	37487546181333	53352698667
MIKA	-23	2590	7407400	14550736000	0.003876	0.000730	0.003146	0.000509	0.000490	0.000019	37686406240000	37487546181333	198860058667
MIKA	-22	2570	6282200	14550736000	-0.007722	0.000730	-0.008452	0.000432	0.000490	-0.000059	37395391520000	37487546181333	-92154661333
MIKA	-21	2580	8350500	14550736000	0.003891	0.000730	0.003161	0.000574	0.000490	0.000084	37540898880000	37487546181333	53352698667
MIKA	-20	2350	7627700	14550736000	-0.089147	0.000730	-0.089877	0.000524	0.000490	0.000034	34194229600000	37487546181333	-3293316581333
MIKA	-19	2580	8424600	14550736000	0.097872	0.000730	0.097143	0.000579	0.000490	0.000089	37540898880000	37487546181333	53352698667
MIKA	-18	2580	6632900	14550736000	0.000000	0.000730	-0.000730	0.000456	0.000490	-0.000034	37540898880000	37487546181333	53352698667
MIKA	-17	2630	5558800	14550736000	0.019380	0.000730	0.018650	0.000382	0.000490	-0.000108	38268435680000	37487546181333	780889498667
MIKA	-16	2560	5520900	14550736000	-0.026616	0.000730	-0.027346	0.000379	0.000490	-0.000111	37249884160000	37487546181333	-237662021333
MIKA	-15	2600	6776800	14550736000	0.015625	0.000730	0.014895	0.000466	0.000490	-0.000025	37831913600000	37487546181333	344367418667
MIKA	-14	2600	8935100	14550736000	0.000000	0.000730	-0.000730	0.000614	0.000490	0.000124	37831913600000	37487546181333	344367418667
MIKA	-13	2630	7363900	14550736000	0.011538	0.000730	0.010809	0.000506	0.000490	0.000016	38268435680000	37487546181333	780889498667

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
MIKA	-12	2600	5063000	14550736000	-0.011407	0.000730	-0.012136	0.000348	0.000490	-0.000142	37831913600000	37487546181333	344367418667
MIKA	-11	2590	4356400	14550736000	-0.003846	0.000730	-0.004576	0.000299	0.000490	-0.000191	37686406240000	37487546181333	198860058667
MIKA	-10	2610	5131800	14550736000	0.007722	0.000730	0.006992	0.000353	0.000490	-0.000138	37977420960000	37487546181333	489874778667
MIKA	-9	2600	4807500	14550736000	-0.003831	0.000730	-0.004561	0.000330	0.000490	-0.000160	37831913600000	37487546181333	344367418667
MIKA	-8	2580	4294400	14550736000	-0.007692	0.000730	-0.008422	0.000295	0.000490	-0.000195	37540898880000	37487546181333	53352698667
MIKA	-7	2560	5968900	14550736000	-0.007752	0.000730	-0.008482	0.000410	0.000490	-0.000080	37249884160000	37487546181333	-237662021333
MIKA	-6	2600	5172600	14550736000	0.015625	0.000730	0.014895	0.000355	0.000490	-0.000135	37831913600000	37487546181333	344367418667
MIKA	-5	2670	4577400	14550736000	0.026923	0.000730	0.026193	0.000315	0.000490	-0.000176	38850465120000	37487546181333	1362918938667
MIKA	-4	2600	7198100	14550736000	-0.026217	0.000730	-0.026947	0.000495	0.000490	0.000004	37831913600000	37487546181333	344367418667
MIKA	-3	2620	8987300	14550736000	0.007692	0.000730	0.006963	0.000618	0.000490	0.000127	38122928320000	37487546181333	635382138667
MIKA	-2	2610	5863500	14550736000	-0.003817	0.000730	-0.004546	0.000403	0.000490	-0.000087	37977420960000	37487546181333	489874778667
MIKA	-1	2700	10194100	14550736000	0.034483	0.000730	0.033753	0.000701	0.000490	0.000210	39286987200000	37487546181333	1799441018667
MIKA	0	2800	7537900	14550736000	0.037037	0.000730	0.036307	0.000518	0.000490	0.000028	40742060800000	37487546181333	3254514618667
MIKA	1	2760	5685000	14550736000	-0.014286	0.000730	-0.015015	0.000391	0.000490	-0.000100	40160031360000	37487546181333	2672485178667
MIKA	2	2750	8598200	14550736000	-0.003623	0.000730	-0.004353	0.000591	0.000490	0.000101	40014524000000	37487546181333	2526977818667
MIKA	3	2790	9196700	14550736000	0.014545	0.000730	0.013816	0.000632	0.000490	0.000142	40596553440000	37487546181333	3109007258667
MIKA	4	2760	9950500	14550736000	-0.010753	0.000730	-0.011482	0.000684	0.000490	0.000194	40160031360000	37487546181333	2672485178667
MIKA	5	2700	5797700	14550736000	-0.021739	0.000730	-0.022469	0.000398	0.000490	-0.000092	39286987200000	37487546181333	1799441018667

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
MTDL	-36	635	832642										
MTDL	-35	616	4938353	2310169758	-0.029631	0.000812	-0.030443	0.002138	0.000214	0.001923	1423672145574	1530901299168	-107229153593
MTDL	-34	616	530366	2310169758	0.000000	0.000812	-0.000812	0.000230	0.000214	0.000015	1423672145574	1530901299168	-107229153593
MTDL	-33	635	3295	2310169758	0.030536	0.000812	0.029724	0.000001	0.000214	-0.000213	1467144906219	1530901299168	-63756392948
MTDL	-32	630	24765	2310169758	-0.007409	0.000812	-0.008220	0.000011	0.000214	-0.000204	1456275518235	1530901299168	-74625780933
MTDL	-31	626	9991	2310169758	-0.007462	0.000812	-0.008274	0.000004	0.000214	-0.000210	1445408525897	1530901299168	-85492773271
MTDL	-30	630	2763	2310169758	0.007518	0.000812	0.006706	0.000001	0.000214	-0.000213	1456275518235	1530901299168	-74625780933
MTDL	-29	626	27315	2310169758	-0.007462	0.000812	-0.008274	0.000012	0.000214	-0.000203	1445408525897	1530901299168	-85492773271
MTDL	-28	626	44640	2310169758	0.000000	0.000812	-0.000812	0.000019	0.000214	-0.000195	1445408525897	1530901299168	-85492773271
MTDL	-27	630	153158	2310169758	0.007518	0.000812	0.006706	0.000066	0.000214	-0.000148	1456275518235	1530901299168	-74625780933
MTDL	-26	626	1063920	2310169758	-0.007462	0.000812	-0.008274	0.000461	0.000214	0.000246	1445408525897	1530901299168	-85492773271
MTDL	-25	659	1303807	2310169758	0.052631	0.000812	0.051820	0.000564	0.000214	0.000350	1521482399857	1530901299168	-9418899311
MTDL	-24	673	456603	2310169758	0.021429	0.000812	0.020617	0.000198	0.000214	-0.000017	1554085911128	1530901299168	23184611960
MTDL	-23	677	472759	2310169758	0.006993	0.000812	0.006181	0.000205	0.000214	-0.000010	1564952901156	1530901299168	34051601988
MTDL	-22	682	135089	2310169758	0.006946	0.000812	0.006134	0.000058	0.000214	-0.000156	1575822289140	1530901299168	44920989972
MTDL	-21	682	573943	2310169758	0.000000	0.000812	-0.000812	0.000248	0.000214	0.000034	1575822289140	1530901299168	44920989972
MTDL	-20	692	427587	2310169758	0.013792	0.000812	0.012980	0.000185	0.000214	-0.000029	1597556271506	1530901299168	66654972338
MTDL	-19	682	146781	2310169758	-0.013605	0.000812	-0.014416	0.000064	0.000214	-0.000151	1575822289140	1530901299168	44920989972
MTDL	-18	687	183343	2310169758	0.006896	0.000812	0.006084	0.000079	0.000214	-0.000135	1586689281478	1530901299168	55787982310
MTDL	-17	687	152733	2310169758	0.000000	0.000812	-0.000812	0.000066	0.000214	-0.000148	1586689281478	1530901299168	55787982310
MTDL	-16	692	366579	2310169758	0.006849	0.000812	0.006037	0.000159	0.000214	-0.000056	1597556271506	1530901299168	66654972338
MTDL	-15	677	435453	2310169758	-0.020408	0.000812	-0.021220	0.000188	0.000214	-0.000026	1564952901156	1530901299168	34051601988
MTDL	-14	677	107030	2310169758	0.000000	0.000812	-0.000812	0.000046	0.000214	-0.000168	1564952901156	1530901299168	34051601988
MTDL	-13	677	16155	2310169758	0.000000	0.000812	-0.000812	0.000007	0.000214	-0.000207	1564952901156	1530901299168	34051601988



Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
MTDL	-12	677	2140594	2310169758	0.000000	0.000812	-0.000812	0.000927	0.000214	0.000712	1564952901156	1530901299168	34051601988
MTDL	-11	682	533023	2310169758	0.006946	0.000812	0.006134	0.000231	0.000214	0.000016	1575822289140	1530901299168	44920989972
MTDL	-10	682	7121	2310169758	0.000000	0.000812	-0.000812	0.000003	0.000214	-0.000211	1575822289140	1530901299168	44920989972
MTDL	-9	692	16049	2310169758	0.013792	0.000812	0.012980	0.000007	0.000214	-0.000207	1597556271506	1530901299168	66654972338
MTDL	-8	682	553749	2310169758	-0.013605	0.000812	-0.014416	0.000240	0.000214	0.000025	1575822289140	1530901299168	44920989972
MTDL	-7	677	11904	2310169758	-0.006898	0.000812	-0.007709	0.000005	0.000214	-0.000209	1564952901156	1530901299168	34051601988
MTDL	-6	682	15943	2310169758	0.006946	0.000812	0.006134	0.000007	0.000214	-0.000207	1575822289140	1530901299168	44920989972
MTDL	-5	692	58989	2310169758	0.013792	0.000812	0.012980	0.000026	0.000214	-0.000189	1597556271506	1530901299168	66654972338
MTDL	-4	687	55906	2310169758	-0.006554	0.000812	-0.007365	0.000024	0.000214	-0.000190	1587086623746	1530901299168	56185324578
MTDL	-3	690	142423	2310169758	0.004367	0.000812	0.003555	0.000062	0.000214	-0.000153	1594017133020	1530901299168	63115833852
MTDL	-2	687	46447	2310169758	-0.004348	0.000812	-0.005160	0.000020	0.000214	-0.000194	1587086623746	1530901299168	56185324578
MTDL	-1	690	12275	2310169758	0.004367	0.000812	0.003555	0.000005	0.000214	-0.000209	1594017133020	1530901299168	63115833852
MTDL	0	686	19557	2310169758	-0.005797	0.000812	-0.006609	0.000008	0.000214	-0.000206	1584776453988	1530901299168	53875154820
MTDL	1	696	21989	2310169758	0.014923	0.000812	0.014111	0.000010	0.000214	-0.000205	1608425661801	1530901299168	77524362633
MTDL	2	692	25523	2310169758	-0.006179	0.000812	-0.006991	0.000011	0.000214	-0.000203	1598487306881	1530901299168	67586007714
MTDL	3	692	51667	2310169758	0.000000	0.000812	-0.000812	0.000022	0.000214	-0.000192	1598487306881	1530901299168	67586007714
MTDL	4	697	340690	2310169758	0.006993	0.000812	0.006182	0.000147	0.000214	-0.000067	1609666192928	1530901299168	78764893761
MTDL	5	697	19427	2310169758	0.000000	0.000812	-0.000812	0.000008	0.000214	-0.000206	1609666192928	1530901299168	78764893761

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
NRCA	-36	630	2847700										
NRCA	-35	655	12305500	2496258344	0.039683	-0.003292	0.042974	0.004930	0.000908	0.004022	1635049215320	1571810670605	63238544715
NRCA	-34	620	1083100	2496258344	-0.053435	-0.003292	-0.050143	0.000434	0.000908	-0.000474	1547680173280	1571810670605	-24130497325
NRCA	-33	620	0	2496258344	0.000000	-0.003292	0.003292	0.000000	0.000908	-0.000908	1547680173280	1571810670605	-24130497325
NRCA	-32	625	2776700	2496258344	0.008065	-0.003292	0.011356	0.001112	0.000908	0.000205	1560161465000	1571810670605	-11649205605
NRCA	-31	630	1620700	2496258344	0.008000	-0.003292	0.011292	0.000649	0.000908	-0.000258	1572642756720	1571810670605	832086115
NRCA	-30	620	3473200	2496258344	-0.015873	-0.003292	-0.012581	0.001391	0.000908	0.000484	1547680173280	1571810670605	-24130497325
NRCA	-29	600	887500	2496258344	-0.032258	-0.003292	-0.028966	0.000356	0.000908	-0.000552	1497755006400	1571810670605	-74055664205
NRCA	-28	600	1906900	2496258344	0.000000	-0.003292	0.003292	0.000764	0.000908	-0.000144	1497755006400	1571810670605	-74055664205
NRCA	-27	600	994800	2496258344	0.000000	-0.003292	0.003292	0.000399	0.000908	-0.000509	1497755006400	1571810670605	-74055664205
NRCA	-26	600	1099900	2496258344	0.000000	-0.003292	0.003292	0.000441	0.000908	-0.000467	1497755006400	1571810670605	-74055664205
NRCA	-25	595	0	2496258344	-0.008333	-0.003292	-0.005042	0.000000	0.000908	-0.000908	1485273714680	1571810670605	-86536955925
NRCA	-24	625	11347000	2496258344	0.050420	-0.003292	0.053712	0.004546	0.000908	0.003638	1560161465000	1571810670605	-11649205605
NRCA	-23	625	1136600	2496258344	0.000000	-0.003292	0.003292	0.000455	0.000908	-0.000452	1560161465000	1571810670605	-11649205605
NRCA	-22	640	797100	2496258344	0.024000	-0.003292	0.027292	0.000319	0.000908	-0.000588	1597605340160	1571810670605	25794669555
NRCA	-21	660	4132500	2496258344	0.031250	-0.003292	0.034542	0.001655	0.000908	0.000748	1647530507040	1571810670605	75719836435
NRCA	-20	665	3761200	2496258344	0.007576	-0.003292	0.010867	0.001507	0.000908	0.000599	1660011798760	1571810670605	88201128155
NRCA	-19	660	7310900	2496258344	-0.007519	-0.003292	-0.004227	0.002929	0.000908	0.002021	1647530507040	1571810670605	75719836435
NRCA	-18	650	1267000	2496258344	-0.015152	-0.003292	-0.011860	0.000508	0.000908	-0.000400	1622567923600	1571810670605	50757252995
NRCA	-17	650	2302600	2496258344	0.000000	-0.003292	0.003292	0.000922	0.000908	0.000015	1622567923600	1571810670605	50757252995
NRCA	-16	650	928900	2496258344	0.000000	-0.003292	0.003292	0.000372	0.000908	-0.000536	1622567923600	1571810670605	50757252995
NRCA	-15	655	2279600	2496258344	0.007692	-0.003292	0.010984	0.000913	0.000908	0.000005	1635049215320	1571810670605	63238544715
NRCA	-14	630	1355000	2496258344	-0.038168	-0.003292	-0.034876	0.000543	0.000908	-0.000365	1572642756720	1571810670605	832086115
NRCA	-13	625	1136600	2496258344	-0.007937	-0.003292	-0.004645	0.000455	0.000908	-0.000452	1560161465000	1571810670605	-11649205605

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
NRCA	-12	635	766800	2496258344	0.016000	-0.003292	0.019292	0.000307	0.000908	-0.000601	1585124048440	1571810670605	13313377835
NRCA	-11	640	284900	2496258344	0.007874	-0.003292	0.011166	0.000114	0.000908	-0.000794	1597605340160	1571810670605	25794669555
NRCA	-10	615	478100	2496258344	-0.039063	-0.003292	-0.035771	0.000192	0.000908	-0.000716	1535198881560	1571810670605	-36611789045
NRCA	-9	625	92900	2496258344	0.016260	-0.003292	0.019552	0.000037	0.000908	-0.000871	1560161465000	1571810670605	-11649205605
NRCA	-8	630	482900	2496258344	0.008000	-0.003292	0.011292	0.000193	0.000908	-0.000714	1572642756720	1571810670605	832086115
NRCA	-7	625	1088300	2496258344	-0.007937	-0.003292	-0.004645	0.000436	0.000908	-0.000472	1560161465000	1571810670605	-11649205605
NRCA	-6	620	879700	2496258344	-0.008000	-0.003292	-0.004708	0.000352	0.000908	-0.000555	1547680173280	1571810670605	-24130497325
NRCA	-5	630	1097000	2496258344	0.016129	-0.003292	0.019421	0.000439	0.000908	-0.000468	1572642756720	1571810670605	832086115
NRCA	-4	625	1783800	2496258344	-0.007937	-0.003292	-0.004645	0.000715	0.000908	-0.000193	1560161465000	1571810670605	-11649205605
NRCA	-3	615	950300	2496258344	-0.016000	-0.003292	-0.012708	0.000381	0.000908	-0.000527	1535198881560	1571810670605	-36611789045
NRCA	-2	625	1940000	2496258344	0.016260	-0.003292	0.019552	0.000777	0.000908	-0.000131	1560161465000	1571810670605	-11649205605
NRCA	-1	615	1144800	2496258344	-0.016000	-0.003292	-0.012708	0.000459	0.000908	-0.000449	1535198881560	1571810670605	-36611789045
NRCA	0	630	859500	2496258344	0.024390	-0.003292	0.027682	0.000344	0.000908	-0.000563	1572642756720	1571810670605	832086115
NRCA	1	620	4757600	2496258344	-0.015873	-0.003292	-0.012581	0.001906	0.000908	0.000998	1547680173280	1571810670605	-24130497325
NRCA	2	620	980200	2496258344	0.000000	-0.003292	0.003292	0.000393	0.000908	-0.000515	1547680173280	1571810670605	-24130497325
NRCA	3	635	1412500	2496258344	0.024194	-0.003292	0.027485	0.000566	0.000908	-0.000342	1585124048440	1571810670605	13313377835
NRCA	4	640	847600	2496258344	0.007874	-0.003292	0.011166	0.000340	0.000908	-0.000568	1597605340160	1571810670605	25794669555
NRCA	5	630	1696800	2496258344	-0.015625	-0.003292	-0.012333	0.000680	0.000908	-0.000228	1572642756720	1571810670605	832086115

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
RAJA	-36	190	3760400										
RAJA	-35	191	3706000	4077082500	0.006579	0.001016	0.005563	0.000909	0.003694	-0.002785	779742028125	892745164750	-113003136625
RAJA	-34	191	5336800	4077082500	0.000000	0.001016	-0.001016	0.001309	0.003694	-0.002385	779742028125	892745164750	-113003136625
RAJA	-33	209	39790000	4077082500	0.091503	0.001016	0.090487	0.009759	0.003694	0.006065	851090971875	892745164750	-41654192875
RAJA	-32	216	45322000	4077082500	0.035928	0.001016	0.034912	0.011116	0.003694	0.007422	881669090625	892745164750	-11076074125
RAJA	-31	221	38623600	4077082500	0.023121	0.001016	0.022105	0.009473	0.003694	0.005779	902054503125	892745164750	9309338375
RAJA	-30	224	7938800	4077082500	0.011299	0.001016	0.010283	0.001947	0.003694	-0.001747	912247209375	892745164750	19502044625
RAJA	-29	229	39381600	4077082500	0.022346	0.001016	0.021330	0.009659	0.003694	0.005965	932632621875	892745164750	39887457125
RAJA	-28	216	26062800	4077082500	-0.054645	0.001016	-0.055661	0.006393	0.003694	0.002698	881669090625	892745164750	-11076074125
RAJA	-27	216	6926400	4077082500	0.000000	0.001016	-0.001016	0.001699	0.003694	-0.001995	881669090625	892745164750	-11076074125
RAJA	-26	214	2768800	4077082500	-0.011561	0.001016	-0.012577	0.000679	0.003694	-0.003015	871476384375	892745164750	-21268780375
RAJA	-25	211	16	4077082500	-0.011696	0.001016	-0.012712	0.000000	0.003694	-0.003694	861283678125	892745164750	-31461486625
RAJA	-24	213	2497200	4077082500	0.005917	0.001016	0.004901	0.000612	0.003694	-0.003082	866380031250	892745164750	-26365133500
RAJA	-23	216	8820400	4077082500	0.017647	0.001016	0.016631	0.002163	0.003694	-0.001531	881669090625	892745164750	-11076074125
RAJA	-22	216	3947600	4077082500	0.000000	0.001016	-0.001016	0.000968	0.003694	-0.002726	881669090625	892745164750	-11076074125
RAJA	-21	214	1820800	4077082500	-0.011561	0.001016	-0.012577	0.000447	0.003694	-0.003248	871476384375	892745164750	-21268780375
RAJA	-20	213	2645200	4077082500	-0.005848	0.001016	-0.006864	0.000649	0.003694	-0.003046	866380031250	892745164750	-26365133500
RAJA	-19	211	16	4077082500	-0.005882	0.001016	-0.006899	0.000000	0.003694	-0.003694	861283678125	892745164750	-31461486625
RAJA	-18	208	1567600	4077082500	-0.017751	0.001016	-0.018768	0.000384	0.003694	-0.003310	845994618750	892745164750	-46750546000
RAJA	-17	224	16461600	4077082500	0.078313	0.001016	0.077297	0.004038	0.003694	0.000343	912247209375	892745164750	19502044625
RAJA	-16	223	8877200	4077082500	-0.005587	0.001016	-0.006603	0.002177	0.003694	-0.001517	907150856250	892745164750	14405691500
RAJA	-15	248	36107600	4077082500	0.114607	0.001016	0.113590	0.008856	0.003694	0.005162	1011116460000	892745164750	118371295250
RAJA	-14	246	11834600	4077082500	-0.008065	0.001016	-0.009081	0.002903	0.003694	-0.000792	1002962295000	892745164750	110217130250
RAJA	-13	242	32091500	4077082500	-0.016260	0.001016	-0.017277	0.007871	0.003694	0.004177	986653965000	892745164750	93908800250

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
RAJA	-12	236	10004400	4077082500	-0.024793	0.001016	-0.025810	0.002454	0.003694	-0.001241	962191470000	892745164750	69446305250
RAJA	-11	228	38227500	4077082500	-0.033898	0.001016	-0.034915	0.009376	0.003694	0.005682	929574810000	892745164750	36829645250
RAJA	-10	218	42283100	4077082500	-0.043860	0.001016	-0.044876	0.010371	0.003694	0.006677	888803985000	892745164750	-3941179750
RAJA	-9	222	5926300	4077082500	0.018349	0.001016	0.017332	0.001454	0.003694	-0.002241	905112315000	892745164750	12367150250
RAJA	-8	216	4144200	4077082500	-0.027027	0.001016	-0.028043	0.001016	0.003694	-0.002678	880649820000	892745164750	-12095344750
RAJA	-7	214	3578900	4077082500	-0.009259	0.001016	-0.010276	0.000878	0.003694	-0.002817	872495655000	892745164750	-20249509750
RAJA	-6	224	5173400	4077082500	0.046729	0.001016	0.045713	0.001269	0.003694	-0.002425	913266480000	892745164750	20521315250
RAJA	-5	230	9625100	4077082500	0.026786	0.001016	0.025769	0.002361	0.003694	-0.001334	937728975000	892745164750	44983810250
RAJA	-4	236	6239500	4077082500	0.026087	0.001016	0.025071	0.001530	0.003694	-0.002164	962191470000	892745164750	69446305250
RAJA	-3	236	15916500	4077082500	0.000000	0.001016	-0.001016	0.003904	0.003694	0.000210	962191470000	892745164750	69446305250
RAJA	-2	230	8608800	4077082500	-0.025424	0.001016	-0.026440	0.002112	0.003694	-0.001583	937728975000	892745164750	44983810250
RAJA	-1	234	13567700	4077082500	0.017391	0.001016	0.016375	0.003328	0.003694	-0.000367	954037305000	892745164750	61292140250
RAJA	0	232	9277200	4077082500	-0.008547	0.001016	-0.009563	0.002275	0.003694	-0.001419	945883140000	892745164750	53137975250
RAJA	1	240	7654100	4077082500	0.034483	0.001016	0.033466	0.001877	0.003694	-0.001817	978499800000	892745164750	85754635250
RAJA	2	230	16326600	4077082500	-0.041667	0.001016	-0.042683	0.004004	0.003694	0.000310	937728975000	892745164750	44983810250
RAJA	3	234	9074500	4077082500	0.017391	0.001016	0.016375	0.002226	0.003694	-0.001469	954037305000	892745164750	61292140250
RAJA	4	238	8949300	4077082500	0.017094	0.001016	0.016078	0.002195	0.003694	-0.001499	970345635000	892745164750	77600470250
RAJA	5	236	12519400	4077082500	-0.008403	0.001016	-0.009420	0.003071	0.003694	-0.000624	962191470000	892745164750	69446305250

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
RALS	-36	685	2644000										
RALS	-35	680	2093200	7096000000	-0.007299	0.008613	-0.015912	0.000295	0.001320	-0.001025	4825280000000	5648416000000	-823136000000
RALS	-34	690	2342300	7096000000	0.014706	0.008613	0.006093	0.000330	0.001320	-0.000990	4896240000000	5648416000000	-752176000000
RALS	-33	680	7226900	7096000000	-0.014493	0.008613	-0.023106	0.001018	0.001320	-0.000301	4825280000000	5648416000000	-823136000000
RALS	-32	675	3754900	7096000000	-0.007353	0.008613	-0.015966	0.000529	0.001320	-0.000790	4789800000000	5648416000000	-858616000000
RALS	-31	680	1893700	7096000000	0.007407	0.008613	-0.001206	0.000267	0.001320	-0.001053	4825280000000	5648416000000	-823136000000
RALS	-30	680	3190300	7096000000	0.000000	0.008613	-0.008613	0.000450	0.001320	-0.000870	4825280000000	5648416000000	-823136000000
RALS	-29	665	3129400	7096000000	-0.022059	0.008613	-0.030672	0.000441	0.001320	-0.000879	4718840000000	5648416000000	-929576000000
RALS	-28	665	4241600	7096000000	0.000000	0.008613	-0.008613	0.000598	0.001320	-0.000722	4718840000000	5648416000000	-929576000000
RALS	-27	670	3157500	7096000000	0.007519	0.008613	-0.001094	0.000445	0.001320	-0.000875	4754320000000	5648416000000	-894096000000
RALS	-26	700	8495000	7096000000	0.044776	0.008613	0.036163	0.001197	0.001320	-0.000122	4967200000000	5648416000000	-681216000000
RALS	-25	730	28442900	7096000000	0.042857	0.008613	0.034244	0.004008	0.001320	0.002689	5180080000000	5648416000000	-468336000000
RALS	-24	795	52234400	7096000000	0.089041	0.008613	0.080428	0.007361	0.001320	0.006041	5641320000000	5648416000000	-7096000000
RALS	-23	795	8343700	7096000000	0.000000	0.008613	-0.008613	0.001176	0.001320	-0.000144	5641320000000	5648416000000	-7096000000
RALS	-22	790	14201700	7096000000	-0.006289	0.008613	-0.014902	0.002001	0.001320	0.000682	5605840000000	5648416000000	-42576000000
RALS	-21	825	19407500	7096000000	0.044304	0.008613	0.035691	0.002735	0.001320	0.001415	5854200000000	5648416000000	205784000000
RALS	-20	830	17596500	7096000000	0.006061	0.008613	-0.002552	0.002480	0.001320	0.001160	5889680000000	5648416000000	241264000000
RALS	-19	825	8469700	7096000000	-0.006024	0.008613	-0.014637	0.001194	0.001320	-0.000126	5854200000000	5648416000000	205784000000
RALS	-18	815	10601000	7096000000	-0.012121	0.008613	-0.020734	0.001494	0.001320	0.000174	5783240000000	5648416000000	134824000000
RALS	-17	820	2113200	7096000000	0.006135	0.008613	-0.002478	0.000298	0.001320	-0.001022	5818720000000	5648416000000	170304000000
RALS	-16	850	8205700	7096000000	0.036585	0.008613	0.027972	0.001156	0.001320	-0.000163	6031600000000	5648416000000	383184000000
RALS	-15	855	12399500	7096000000	0.005882	0.008613	-0.002731	0.001747	0.001320	0.000428	6067080000000	5648416000000	418664000000
RALS	-14	870	7828800	7096000000	0.017544	0.008613	0.008931	0.001103	0.001320	-0.000216	6173520000000	5648416000000	525104000000
RALS	-13	905	12939000	7096000000	0.040230	0.008613	0.031617	0.001823	0.001320	0.000504	6421880000000	5648416000000	773464000000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
RALS	-12	915	3591800	7096000000	0.011050	0.008613	0.002437	0.000506	0.001320	-0.000813	6492840000000	5648416000000	844424000000
RALS	-11	900	4533300	7096000000	-0.016393	0.008613	-0.025006	0.000639	0.001320	-0.000681	6386400000000	5648416000000	737984000000
RALS	-10	930	14029600	7096000000	0.033333	0.008613	0.024720	0.001977	0.001320	0.000658	6599280000000	5648416000000	950864000000
RALS	-9	920	6102300	7096000000	-0.010753	0.008613	-0.019366	0.000860	0.001320	-0.000460	6528320000000	5648416000000	879904000000
RALS	-8	920	4770900	7096000000	0.000000	0.008613	-0.008613	0.000672	0.001320	-0.000647	6528320000000	5648416000000	879904000000
RALS	-7	905	2916800	7096000000	-0.016304	0.008613	-0.024917	0.000411	0.001320	-0.000909	6421880000000	5648416000000	773464000000
RALS	-6	900	2665700	7096000000	-0.005525	0.008613	-0.014138	0.000376	0.001320	-0.000944	6386400000000	5648416000000	737984000000
RALS	-5	970	24430200	7096000000	0.077778	0.008613	0.069165	0.003443	0.001320	0.002123	6883120000000	5648416000000	1234704000000
RALS	-4	980	11490000	7096000000	0.010309	0.008613	0.001696	0.001619	0.001320	0.000300	6954080000000	5648416000000	1305664000000
RALS	-3	980	2167300	7096000000	0.000000	0.008613	-0.008613	0.000305	0.001320	-0.001014	6954080000000	5648416000000	1305664000000
RALS	-2	980	8555200	7096000000	0.000000	0.008613	-0.008613	0.001206	0.001320	-0.000114	6954080000000	5648416000000	1305664000000
RALS	-1	980	12083900	7096000000	0.000000	0.008613	-0.008613	0.001703	0.001320	0.000383	6954080000000	5648416000000	1305664000000
RALS	0	1030	19985500	7096000000	0.051020	0.008613	0.042407	0.002816	0.001320	0.001497	7308880000000	5648416000000	1660464000000
RALS	1	1030	18197700	7096000000	0.000000	0.008613	-0.008613	0.002565	0.001320	0.001245	7308880000000	5648416000000	1660464000000
RALS	2	1070	30639500	7096000000	0.038835	0.008613	0.030222	0.004318	0.001320	0.002998	7592720000000	5648416000000	1944304000000
RALS	3	1035	4534500	7096000000	-0.032710	0.008613	-0.041323	0.000639	0.001320	-0.000681	7344360000000	5648416000000	1695944000000
RALS	4	1040	23938700	7096000000	0.004831	0.008613	-0.003782	0.003374	0.001320	0.002054	7379840000000	5648416000000	1731424000000
RALS	5	1010	13428400	7096000000	-0.028846	0.008613	-0.037459	0.001892	0.001320	0.000573	7166960000000	5648416000000	1518544000000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ROTI	-36	1475	3997800										
ROTI	-35	1445	1253300	5061800000	-0.020339	-0.000678	-0.019661	0.000248	0.000224	0.000023	7314301000000	7272962966667	41338033333
ROTI	-34	1470	817400	5061800000	0.017301	-0.000678	0.017979	0.000161	0.000224	-0.000063	7440846000000	7272962966667	167883033333
ROTI	-33	1510	5956500	5061800000	0.027211	-0.000678	0.027889	0.001177	0.000224	0.000953	7643318000000	7272962966667	370355033333
ROTI	-32	1475	1202800	5061800000	-0.023179	-0.000678	-0.022501	0.000238	0.000224	0.000013	7466155000000	7272962966667	193192033333
ROTI	-31	1460	1137100	5061800000	-0.010169	-0.000678	-0.009491	0.000225	0.000224	0.000000	7390228000000	7272962966667	117265033333
ROTI	-30	1485	764400	5061800000	0.017123	-0.000678	0.017801	0.000151	0.000224	-0.000073	7516773000000	7272962966667	243810033333
ROTI	-29	1455	733500	5061800000	-0.020202	-0.000678	-0.019524	0.000145	0.000224	-0.000079	7364919000000	7272962966667	91956033333
ROTI	-28	1395	1719600	5061800000	-0.041237	-0.000678	-0.040559	0.000340	0.000224	0.000116	7061211000000	7272962966667	-211751966667
ROTI	-27	1400	722000	5061800000	0.003584	-0.000678	0.004262	0.000143	0.000224	-0.000082	7086520000000	7272962966667	-186442966667
ROTI	-26	1405	1446600	5061800000	0.003571	-0.000678	0.004250	0.000286	0.000224	0.000062	7111829000000	7272962966667	-161133966667
ROTI	-25	1390	601700	5061800000	-0.010676	-0.000678	-0.009998	0.000119	0.000224	-0.000105	7035902000000	7272962966667	-237060966667
ROTI	-24	1400	465300	5061800000	0.007194	-0.000678	0.007872	0.000092	0.000224	-0.000132	7086520000000	7272962966667	-186442966667
ROTI	-23	1450	811100	5061800000	0.035714	-0.000678	0.036392	0.000160	0.000224	-0.000064	7339610000000	7272962966667	66647033333
ROTI	-22	1455	2105400	5061800000	0.003448	-0.000678	0.004126	0.000416	0.000224	0.000192	7364919000000	7272962966667	91956033333
ROTI	-21	1425	559400	5061800000	-0.020619	-0.000678	-0.019940	0.000111	0.000224	-0.000114	7213065000000	7272962966667	-59897966667
ROTI	-20	1420	2250200	5061800000	-0.003509	-0.000678	-0.002831	0.000445	0.000224	0.000220	7187756000000	7272962966667	-85206966667
ROTI	-19	1420	1529400	5061800000	0.000000	-0.000678	0.000678	0.000302	0.000224	0.000078	7187756000000	7272962966667	-85206966667
ROTI	-18	1430	179500	5061800000	0.007042	-0.000678	0.007720	0.000035	0.000224	-0.000189	7238374000000	7272962966667	-34588966667
ROTI	-17	1440	739900	5061800000	0.006993	-0.000678	0.007671	0.000146	0.000224	-0.000078	7288992000000	7272962966667	16029033333
ROTI	-16	1450	1075900	5061800000	0.006944	-0.000678	0.007623	0.000213	0.000224	-0.000012	7339610000000	7272962966667	66647033333
ROTI	-15	1450	910900	5061800000	0.000000	-0.000678	0.000678	0.000180	0.000224	-0.000044	7339610000000	7272962966667	66647033333
ROTI	-14	1425	540500	5061800000	-0.017241	-0.000678	-0.016563	0.000107	0.000224	-0.000117	7213065000000	7272962966667	-59897966667
ROTI	-13	1420	364200	5061800000	-0.003509	-0.000678	-0.002831	0.000072	0.000224	-0.000152	7187756000000	7272962966667	-85206966667



Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
ROTI	-12	1440	114900	5061800000	0.014085	-0.000678	0.014763	0.000023	0.000224	-0.000202	7288992000000	7272962966667	16029033333
ROTI	-11	1440	461500	5061800000	0.000000	-0.000678	0.000678	0.000091	0.000224	-0.000133	7288992000000	7272962966667	16029033333
ROTI	-10	1420	1607900	5061800000	-0.013889	-0.000678	-0.013211	0.000318	0.000224	0.000093	7187756000000	7272962966667	-85206966667
ROTI	-9	1430	578900	5061800000	0.007042	-0.000678	0.007720	0.000114	0.000224	-0.000110	7238374000000	7272962966667	-34588966667
ROTI	-8	1430	434200	5061800000	0.000000	-0.000678	0.000678	0.000086	0.000224	-0.000138	7238374000000	7272962966667	-34588966667
ROTI	-7	1435	2028500	5061800000	0.003497	-0.000678	0.004175	0.000401	0.000224	0.000177	7263683000000	7272962966667	-9279966667
ROTI	-6	1435	933600	5061800000	0.000000	-0.000678	0.000678	0.000184	0.000224	-0.000040	7263683000000	7272962966667	-9279966667
ROTI	-5	1480	2105600	5061800000	0.031359	-0.000678	0.032037	0.000416	0.000224	0.000192	7491464000000	7272962966667	218501033333
ROTI	-4	1490	1211600	5061800000	0.006757	-0.000678	0.007435	0.000239	0.000224	0.000015	7542082000000	7272962966667	269119033333
ROTI	-3	1490	763900	5061800000	0.000000	-0.000678	0.000678	0.000151	0.000224	-0.000073	7542082000000	7272962966667	269119033333
ROTI	-2	1495	951600	5061800000	0.003356	-0.000678	0.004034	0.000188	0.000224	-0.000036	7567391000000	7272962966667	294428033333
ROTI	-1	1500	1074900	5061800000	0.003344	-0.000678	0.004023	0.000212	0.000224	-0.000012	7592700000000	7272962966667	319737033333
ROTI	0	1500	3067000	5061800000	0.000000	-0.000678	0.000678	0.000606	0.000224	0.000382	7592700000000	7272962966667	319737033333
ROTI	1	1555	5096000	5061800000	0.036667	-0.000678	0.037345	0.001007	0.000224	0.000783	7871099000000	7272962966667	598136033333
ROTI	2	1580	5581800	5061800000	0.016077	-0.000678	0.016755	0.001103	0.000224	0.000879	7997644000000	7272962966667	724681033333
ROTI	3	1530	1650400	5061800000	-0.031646	-0.000678	-0.030967	0.000326	0.000224	0.000102	7744554000000	7272962966667	471591033333
ROTI	4	1575	4169000	5061800000	0.029412	-0.000678	0.030090	0.000824	0.000224	0.000599	7972335000000	7272962966667	699372033333
ROTI	5	1630	5484200	5061800000	0.034921	-0.000678	0.035599	0.001083	0.000224	0.000859	8250734000000	7272962966667	977771033333

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SAME	-36	592	2274000										
SAME	-35	564	1408500	1180000000	-0.047297	-0.001904	-0.045394	0.001194	0.001692	-0.000498	665520000000	670869333333	-5349333333
SAME	-34	568	2149000	1180000000	0.007092	-0.001904	0.008996	0.001821	0.001692	0.000129	670240000000	670869333333	-6293333333
SAME	-33	572	2182000	1180000000	0.007042	-0.001904	0.008946	0.001849	0.001692	0.000157	674960000000	670869333333	4090666667
SAME	-32	576	1941000	1180000000	0.006993	-0.001904	0.008897	0.001645	0.001692	-0.000047	679680000000	670869333333	8810666667
SAME	-31	572	1680500	1180000000	-0.006944	-0.001904	-0.005041	0.001424	0.001692	-0.000268	674960000000	670869333333	4090666667
SAME	-30	568	1751000	1180000000	-0.006993	-0.001904	-0.005089	0.001484	0.001692	-0.000208	670240000000	670869333333	-6293333333
SAME	-29	570	2914500	1180000000	0.003521	-0.001904	0.005425	0.002470	0.001692	0.000778	672600000000	670869333333	1730666667
SAME	-28	570	2165500	1180000000	0.000000	-0.001904	0.001904	0.001835	0.001692	0.000143	672600000000	670869333333	1730666667
SAME	-27	570	2071000	1180000000	0.000000	-0.001904	0.001904	0.001755	0.001692	0.000063	672600000000	670869333333	1730666667
SAME	-26	582	1955000	1180000000	0.021053	-0.001904	0.022956	0.001657	0.001692	-0.000035	686760000000	670869333333	15890666667
SAME	-25	552	2058500	1180000000	-0.051546	-0.001904	-0.049643	0.001744	0.001692	0.000052	651360000000	670869333333	-19509333333
SAME	-24	558	2235000	1180000000	0.010870	-0.001904	0.012773	0.001894	0.001692	0.000202	658440000000	670869333333	-12429333333
SAME	-23	556	1779000	1180000000	-0.003584	-0.001904	-0.001680	0.001508	0.001692	-0.000184	656080000000	670869333333	-14789333333
SAME	-22	560	2104000	1180000000	0.007194	-0.001904	0.009098	0.001783	0.001692	0.000091	660800000000	670869333333	-10069333333
SAME	-21	562	1739500	1180000000	0.003571	-0.001904	0.005475	0.001474	0.001692	-0.000218	663160000000	670869333333	-7709333333
SAME	-20	560	2144500	1180000000	-0.003559	-0.001904	-0.001655	0.001817	0.001692	0.000125	660800000000	670869333333	-10069333333
SAME	-19	570	2361000	1180000000	0.017857	-0.001904	0.019761	0.002001	0.001692	0.000309	672600000000	670869333333	1730666667
SAME	-18	576	1746500	1180000000	0.010526	-0.001904	0.012430	0.001480	0.001692	-0.000212	679680000000	670869333333	8810666667
SAME	-17	572	1870500	1180000000	-0.006944	-0.001904	-0.005041	0.001585	0.001692	-0.000107	674960000000	670869333333	4090666667
SAME	-16	578	2093000	1180000000	0.010490	-0.001904	0.012393	0.001774	0.001692	0.000082	682040000000	670869333333	11170666667
SAME	-15	580	1707000	1180000000	0.003460	-0.001904	0.005364	0.001447	0.001692	-0.000245	684400000000	670869333333	13530666667
SAME	-14	576	2086000	1180000000	-0.006897	-0.001904	-0.004993	0.001768	0.001692	0.000076	679680000000	670869333333	8810666667
SAME	-13	570	1713000	1180000000	-0.010417	-0.001904	-0.008513	0.001452	0.001692	-0.000240	672600000000	670869333333	1730666667

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SAME	-12	568	1868500	1180000000	-0.003509	-0.001904	-0.001605	0.001583	0.001692	-0.000109	670240000000	670869333333	-629333333
SAME	-11	566	2130500	1180000000	-0.003521	-0.001904	-0.001617	0.001806	0.001692	0.000113	667880000000	670869333333	-2989333333
SAME	-10	568	1998500	1180000000	0.003534	-0.001904	0.005437	0.001694	0.001692	0.000002	670240000000	670869333333	-629333333
SAME	-9	566	2066500	1180000000	-0.003521	-0.001904	-0.001617	0.001751	0.001692	0.000059	667880000000	670869333333	-2989333333
SAME	-8	568	1921500	1180000000	0.003534	-0.001904	0.005437	0.001628	0.001692	-0.000064	670240000000	670869333333	-629333333
SAME	-7	570	2124000	1180000000	0.003521	-0.001904	0.005425	0.001800	0.001692	0.000108	672600000000	670869333333	1730666667
SAME	-6	568	1934500	1180000000	-0.003509	-0.001904	-0.001605	0.001639	0.001692	-0.000053	670240000000	670869333333	-629333333
SAME	-5	574	2113500	1180000000	0.010563	-0.001904	0.012467	0.001791	0.001692	0.000099	677320000000	670869333333	6450666667
SAME	-4	576	1774500	1180000000	0.003484	-0.001904	0.005388	0.001504	0.001692	-0.000188	679680000000	670869333333	8810666667
SAME	-3	578	2617000	1180000000	0.003472	-0.001904	0.005376	0.002218	0.001692	0.000526	682040000000	670869333333	11170666667
SAME	-2	572	1648000	1180000000	-0.010381	-0.001904	-0.008477	0.001397	0.001692	-0.000295	674960000000	670869333333	4090666667
SAME	-1	574	2163500	1180000000	0.003497	-0.001904	0.005400	0.001833	0.001692	0.000141	677320000000	670869333333	6450666667
SAME	0	576	1884500	1180000000	0.003484	-0.001904	0.005388	0.001597	0.001692	-0.000095	679680000000	670869333333	8810666667
SAME	1	578	2103500	1180000000	0.003472	-0.001904	0.005376	0.001783	0.001692	0.000091	682040000000	670869333333	11170666667
SAME	2	576	2064500	1180000000	-0.003460	-0.001904	-0.001556	0.001750	0.001692	0.000057	679680000000	670869333333	8810666667
SAME	3	576	1779000	1180000000	0.000000	-0.001904	0.001904	0.001508	0.001692	-0.000184	679680000000	670869333333	8810666667
SAME	4	580	2021000	1180000000	0.006944	-0.001904	0.008848	0.001713	0.001692	0.000021	684400000000	670869333333	13530666667
SAME	5	578	1768000	1180000000	-0.003448	-0.001904	-0.001545	0.001498	0.001692	-0.000194	682040000000	670869333333	11170666667

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SCMA	-36	3165	2283600										
SCMA	-35	3115	2749600	14621601234	-0.015798	0.000141	-0.015938	0.000188	0.000457	-0.000269	45546287843910	48258594872817	-2712307028907
SCMA	-34	3090	3901000	14621601234	-0.008026	0.000141	-0.008166	0.000267	0.000457	-0.000190	45180747813060	48258594872817	-3077847059757
SCMA	-33	3200	4839200	14621601234	0.035599	0.000141	0.035458	0.000331	0.000457	-0.000126	46789123948800	48258594872817	-1469470924017
SCMA	-32	3200	2475800	14621601234	0.000000	0.000141	-0.000141	0.000169	0.000457	-0.000288	46789123948800	48258594872817	-1469470924017
SCMA	-31	3280	4086100	14621601234	0.025000	0.000141	0.024859	0.000279	0.000457	-0.000178	47958852047520	48258594872817	-299742825297
SCMA	-30	3390	4807200	14621601234	0.033537	0.000141	0.033396	0.000329	0.000457	-0.000128	49567228183260	48258594872817	1308633310443
SCMA	-29	3360	3357700	14621601234	-0.008850	0.000141	-0.008990	0.000230	0.000457	-0.000228	49128580146240	48258594872817	869985273423
SCMA	-28	3320	4833100	14621601234	-0.011905	0.000141	-0.012045	0.000331	0.000457	-0.000127	48543716096880	48258594872817	285121224063
SCMA	-27	3310	9198900	14621601234	-0.003012	0.000141	-0.003153	0.000629	0.000457	0.000172	48397500084540	48258594872817	138905211723
SCMA	-26	3260	5538600	14621601234	-0.015106	0.000141	-0.015246	0.000379	0.000457	-0.000078	47666420022840	48258594872817	-592174849977
SCMA	-25	3280	2850900	14621601234	0.006135	0.000141	0.005994	0.000195	0.000457	-0.000262	47958852047520	48258594872817	-299742825297
SCMA	-24	3500	16045600	14621601234	0.067073	0.000141	0.066933	0.001097	0.000457	0.000640	51175604319000	48258594872817	2917009446183
SCMA	-23	3400	5108100	14621601234	-0.028571	0.000141	-0.028712	0.000349	0.000457	-0.000108	49713444195600	48258594872817	1454849322783
SCMA	-22	3440	6133000	14621601234	0.011765	0.000141	0.011624	0.000419	0.000457	-0.000038	50298308244960	48258594872817	2039713372143
SCMA	-21	3380	3022400	14621601234	-0.017442	0.000141	-0.017582	0.000207	0.000457	-0.000251	49421012170920	48258594872817	1162417298103
SCMA	-20	3350	10808500	14621601234	-0.008876	0.000141	-0.009016	0.000739	0.000457	0.000282	48982364133900	48258594872817	723769261083
SCMA	-19	3410	4870700	14621601234	0.017910	0.000141	0.017770	0.000333	0.000457	-0.000124	49859660207940	48258594872817	1601065335123
SCMA	-18	3460	7373300	14621601234	0.014663	0.000141	0.014522	0.000504	0.000457	0.000047	50590740269640	48258594872817	2332145396823
SCMA	-17	3380	7001800	14621601234	-0.023121	0.000141	-0.023262	0.000479	0.000457	0.000022	49421012170920	48258594872817	1162417298103
SCMA	-16	3360	5944600	14621601234	-0.005917	0.000141	-0.006058	0.000407	0.000457	-0.000051	49128580146240	48258594872817	869985273423
SCMA	-15	3440	4366400	14621601234	0.023810	0.000141	0.023669	0.000299	0.000457	-0.000159	50298308244960	48258594872817	2039713372143
SCMA	-14	3340	14406100	14621601234	-0.029070	0.000141	-0.029210	0.000985	0.000457	0.000528	48836148121560	48258594872817	577553248743
SCMA	-13	3230	18375900	14621601234	-0.032934	0.000141	-0.033075	0.001257	0.000457	0.000799	47227771985820	48258594872817	-1030822886997

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SCMA	-12	3230	5038600	14621601234	0.000000	0.000141	-0.000141	0.000345	0.000457	-0.000113	47227771985820	48258594872817	-1030822886997
SCMA	-11	3170	8003300	14621601234	-0.018576	0.000141	-0.018716	0.000547	0.000457	0.000090	46350475911780	48258594872817	-1908118961037
SCMA	-10	3180	4286800	14621601234	0.003155	0.000141	0.003014	0.000293	0.000457	-0.000164	46496691924120	48258594872817	-1761902948697
SCMA	-9	3180	10042200	14621601234	0.000000	0.000141	-0.000141	0.000687	0.000457	0.000230	46496691924120	48258594872817	-1761902948697
SCMA	-8	3160	6289000	14621601234	-0.006289	0.000141	-0.006430	0.000430	0.000457	-0.000027	46204259899440	48258594872817	-2054334973377
SCMA	-7	3320	7977800	14621601234	0.050633	0.000141	0.050492	0.000546	0.000457	0.000088	48543716096880	48258594872817	285121224063
SCMA	-6	3280	6849900	14621601234	-0.012048	0.000141	-0.012189	0.000468	0.000457	0.000011	47958852047520	48258594872817	-299742825297
SCMA	-5	3330	12797400	14621601234	0.015244	0.000141	0.015103	0.000875	0.000457	0.000418	48689932109220	48258594872817	431337236403
SCMA	-4	3340	3839600	14621601234	0.003003	0.000141	0.002862	0.000263	0.000457	-0.000195	48836148121560	48258594872817	577553248743
SCMA	-3	3340	3409000	14621601234	0.000000	0.000141	-0.000141	0.000233	0.000457	-0.000224	48836148121560	48258594872817	577553248743
SCMA	-2	3360	6729500	14621601234	0.005988	0.000141	0.005847	0.000460	0.000457	0.000003	49128580146240	48258594872817	869985273423
SCMA	-1	3340	2810300	14621601234	-0.005952	0.000141	-0.006093	0.000192	0.000457	-0.000265	48836148121560	48258594872817	577553248743
SCMA	0	3330	5663800	14621601234	-0.002994	0.000141	-0.003135	0.000387	0.000457	-0.000070	48689932109220	48258594872817	431337236403
SCMA	1	3330	10465100	14621601234	0.000000	0.000141	-0.000141	0.000716	0.000457	0.000258	48689932109220	48258594872817	431337236403
SCMA	2	3310	5231500	14621601234	-0.006006	0.000141	-0.006147	0.000358	0.000457	-0.000099	48397500084540	48258594872817	138905211723
SCMA	3	3320	6331500	14621601234	0.003021	0.000141	0.002881	0.000433	0.000457	-0.000024	48543716096880	48258594872817	285121224063
SCMA	4	3280	12639000	14621601234	-0.012048	0.000141	-0.012189	0.000864	0.000457	0.000407	47958852047520	48258594872817	-299742825297
SCMA	5	3290	6605900	14621601234	0.003049	0.000141	0.002908	0.000452	0.000457	-0.000005	48105068059860	48258594872817	-153526812957

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SIDO	-36	505	3100000										
SIDO	-35	505	13110500	15000000000	0.000000	0.002125	-0.002125	0.000874	0.000301	0.000573	7575000000000	7682500000000	-107500000000
SIDO	-34	505	4738600	15000000000	0.000000	0.002125	-0.002125	0.000316	0.000301	0.000015	7575000000000	7682500000000	-107500000000
SIDO	-33	500	3024200	15000000000	-0.009901	0.002125	-0.012026	0.000202	0.000301	-0.000100	7500000000000	7682500000000	-182500000000
SIDO	-32	515	4114100	15000000000	0.030000	0.002125	0.027875	0.000274	0.000301	-0.000027	7725000000000	7682500000000	42500000000
SIDO	-31	515	2852700	15000000000	0.000000	0.002125	-0.002125	0.000190	0.000301	-0.000111	7725000000000	7682500000000	42500000000
SIDO	-30	515	1192400	15000000000	0.000000	0.002125	-0.002125	0.000079	0.000301	-0.000222	7725000000000	7682500000000	42500000000
SIDO	-29	520	3905700	15000000000	0.009709	0.002125	0.007583	0.000260	0.000301	-0.000041	7800000000000	7682500000000	117500000000
SIDO	-28	525	10351300	15000000000	0.009615	0.002125	0.007490	0.000690	0.000301	0.000389	7875000000000	7682500000000	192500000000
SIDO	-27	530	2982700	15000000000	0.009524	0.002125	0.007399	0.000199	0.000301	-0.000102	7950000000000	7682500000000	267500000000
SIDO	-26	535	3750500	15000000000	0.009434	0.002125	0.007309	0.000250	0.000301	-0.000051	8025000000000	7682500000000	342500000000
SIDO	-25	535	5915600	15000000000	0.000000	0.002125	-0.002125	0.000394	0.000301	0.000093	8025000000000	7682500000000	342500000000
SIDO	-24	535	13294400	15000000000	0.000000	0.002125	-0.002125	0.000886	0.000301	0.000585	8025000000000	7682500000000	342500000000
SIDO	-23	510	5636600	15000000000	-0.046729	0.002125	-0.048854	0.000376	0.000301	0.000075	7650000000000	7682500000000	-32500000000
SIDO	-22	510	1407300	15000000000	0.000000	0.002125	-0.002125	0.000094	0.000301	-0.000207	7650000000000	7682500000000	-32500000000
SIDO	-21	515	2330500	15000000000	0.009804	0.002125	0.007679	0.000155	0.000301	-0.000146	7725000000000	7682500000000	42500000000
SIDO	-20	505	1449800	15000000000	-0.019417	0.002125	-0.021543	0.000097	0.000301	-0.000205	7575000000000	7682500000000	-107500000000
SIDO	-19	500	880300	15000000000	-0.009901	0.002125	-0.012026	0.000059	0.000301	-0.000242	7500000000000	7682500000000	-182500000000
SIDO	-18	510	2902700	15000000000	0.020000	0.002125	0.017875	0.000194	0.000301	-0.000108	7650000000000	7682500000000	-32500000000
SIDO	-17	520	3941600	15000000000	0.019608	0.002125	0.017483	0.000263	0.000301	-0.000038	7800000000000	7682500000000	117500000000
SIDO	-16	505	9954300	15000000000	-0.028846	0.002125	-0.030971	0.000664	0.000301	0.000362	7575000000000	7682500000000	-107500000000
SIDO	-15	505	2380600	15000000000	0.000000	0.002125	-0.002125	0.000159	0.000301	-0.000142	7575000000000	7682500000000	-107500000000
SIDO	-14	510	8298200	15000000000	0.009901	0.002125	0.007776	0.000553	0.000301	0.000252	7650000000000	7682500000000	-32500000000
SIDO	-13	505	569100	15000000000	-0.009804	0.002125	-0.011929	0.000038	0.000301	-0.000263	7575000000000	7682500000000	-107500000000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SIDO	-12	505	9596800	15000000000	0.000000	0.002125	-0.002125	0.000640	0.000301	0.000339	7575000000000	7682500000000	-107500000000
SIDO	-11	505	3312200	15000000000	0.000000	0.002125	-0.002125	0.000221	0.000301	-0.000080	7575000000000	7682500000000	-107500000000
SIDO	-10	505	1564600	15000000000	0.000000	0.002125	-0.002125	0.000104	0.000301	-0.000197	7575000000000	7682500000000	-107500000000
SIDO	-9	500	1543000	15000000000	-0.009901	0.002125	-0.012026	0.000103	0.000301	-0.000198	7500000000000	7682500000000	-182500000000
SIDO	-8	500	556700	15000000000	0.000000	0.002125	-0.002125	0.000037	0.000301	-0.000264	7500000000000	7682500000000	-182500000000
SIDO	-7	505	6193800	15000000000	0.010000	0.002125	0.007875	0.000413	0.000301	0.000112	7575000000000	7682500000000	-107500000000
SIDO	-6	515	3776500	15000000000	0.019802	0.002125	0.017677	0.000252	0.000301	-0.000049	7725000000000	7682500000000	42500000000
SIDO	-5	520	670600	15000000000	0.009709	0.002125	0.007583	0.000045	0.000301	-0.000256	7800000000000	7682500000000	117500000000
SIDO	-4	535	6239500	15000000000	0.028846	0.002125	0.026721	0.000416	0.000301	0.000115	8025000000000	7682500000000	342500000000
SIDO	-3	545	4441800	15000000000	0.018692	0.002125	0.016566	0.000296	0.000301	-0.000005	8175000000000	7682500000000	492500000000
SIDO	-2	535	4753600	15000000000	-0.018349	0.002125	-0.020474	0.000317	0.000301	0.000016	8025000000000	7682500000000	342500000000
SIDO	-1	540	4012700	15000000000	0.009346	0.002125	0.007220	0.000268	0.000301	-0.000034	8100000000000	7682500000000	417500000000
SIDO	0	535	3736900	15000000000	-0.009259	0.002125	-0.011385	0.000249	0.000301	-0.000052	8025000000000	7682500000000	342500000000
SIDO	1	530	6776900	15000000000	-0.009346	0.002125	-0.011471	0.000452	0.000301	0.000151	7950000000000	7682500000000	267500000000
SIDO	2	545	4553100	15000000000	0.028302	0.002125	0.026177	0.000304	0.000301	0.000002	8175000000000	7682500000000	492500000000
SIDO	3	540	8717900	15000000000	-0.009174	0.002125	-0.011300	0.000581	0.000301	0.000280	8100000000000	7682500000000	417500000000
SIDO	4	520	10734800	15000000000	-0.037037	0.002125	-0.039162	0.000716	0.000301	0.000414	7800000000000	7682500000000	117500000000
SIDO	5	520	8151900	15000000000	0.000000	0.002125	-0.002125	0.000543	0.000301	0.000242	7800000000000	7682500000000	117500000000

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SILO	-36	8509	683364										
SILO	-35	8412	650443	1156100000	-0.011494	0.003248	-0.014743	0.000563	0.003709	-0.003146	9724742887297	11047761748757	-1323018861460
SILO	-34	8485	843982	1156100000	0.008720	0.003248	0.005472	0.000730	0.003709	-0.002979	9809543498615	11047761748757	-1238218250141
SILO	-33	8461	472446	1156100000	-0.002882	0.003248	-0.006130	0.000409	0.003709	-0.003300	9781276628176	11047761748757	-1266485120581
SILO	-32	8754	939575	1156100000	0.034682	0.003248	0.031434	0.000813	0.003709	-0.002896	10120510690473	11047761748757	-927251058284
SILO	-31	8558	181167	1156100000	-0.022346	0.003248	-0.025595	0.000157	0.003709	-0.003552	9894354272053	11047761748757	-1153407476704
SILO	-30	8632	5303946	1156100000	0.008572	0.003248	0.005323	0.004588	0.003709	0.000879	9979166175000	11047761748757	-1068595573757
SILO	-29	8925	7349132	1156100000	0.033994	0.003248	0.030746	0.006357	0.003709	0.002648	10318400237297	11047761748757	-729361511460
SILO	-28	9072	8644396	1156100000	0.016439	0.003248	0.013191	0.007477	0.003709	0.003769	10488024042035	11047761748757	-559737706722
SILO	-27	9194	7706559	1156100000	0.013477	0.003248	0.010228	0.006666	0.003709	0.002957	10629368556352	11047761748757	-418393192405
SILO	-26	8999	4293929	1156100000	-0.021277	0.003248	-0.024525	0.003714	0.003709	0.000005	10403212139088	11047761748757	-644549609669
SILO	-25	8999	6814014	1156100000	0.000000	0.003248	-0.003248	0.005894	0.003709	0.002185	10403212139088	11047761748757	-644549609669
SILO	-24	8999	5424486	1156100000	0.000000	0.003248	-0.003248	0.004692	0.003709	0.000983	10403212139088	11047761748757	-644549609669
SILO	-23	8950	6776697	1156100000	-0.005435	0.003248	-0.008684	0.005862	0.003709	0.002153	10346667107736	11047761748757	-701094641020
SILO	-22	9170	6018289	1156100000	0.024591	0.003248	0.021343	0.005206	0.003709	0.001497	10601101685912	11047761748757	-446660062845
SILO	-21	9243	5141387	1156100000	0.007999	0.003248	0.004751	0.004447	0.003709	0.000738	10685901168877	11047761748757	-361860579880
SILO	-20	9903	7081164	1156100000	0.071429	0.003248	0.068180	0.006125	0.003709	0.002416	11449182323615	11047761748757	401420574859
SILO	-19	9879	3217456	1156100000	-0.002469	0.003248	-0.005717	0.002783	0.003709	-0.000926	11420915453176	11047761748757	373153704419
SILO	-18	9952	5736008	1156100000	0.007426	0.003248	0.004178	0.004962	0.003709	0.001253	11505727356123	11047761748757	457965607366
SILO	-17	9952	4260497	1156100000	0.000000	0.003248	-0.003248	0.003685	0.003709	-0.000023	11505727356123	11047761748757	457965607366
SILO	-16	9757	1148551	1156100000	-0.019656	0.003248	-0.022904	0.000993	0.003709	-0.002715	11279570938859	11047761748757	231809190103
SILO	-15	9879	1555973	1156100000	0.012531	0.003248	0.009283	0.001346	0.003709	-0.002363	11420915453176	11047761748757	373153704419
SILO	-14	9928	3678349	1156100000	0.004950	0.003248	0.001702	0.003182	0.003709	-0.000527	11477449195211	11047761748757	429687446454
SILO	-13	10172	7122264	1156100000	0.024635	0.003248	0.021387	0.006161	0.003709	0.002452	11760195804561	11047761748757	712434055804



Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SILO	-12	10515	7225014	1156100000	0.033650	0.003248	0.030402	0.006249	0.003709	0.002541	12155928607965	11047761748757	1108166859208
SILO	-11	11053	6965327	1156100000	0.051167	0.003248	0.047919	0.006025	0.003709	0.002316	12777910407965	11047761748757	1730148659208
SILO	-10	10735	844186	1156100000	-0.028762	0.003248	-0.032011	0.000730	0.003709	-0.002978	12410386895440	11047761748757	1362625146683
SILO	-9	10515	694099	1156100000	-0.020504	0.003248	-0.023752	0.000600	0.003709	-0.003108	12155928607965	11047761748757	1108166859208
SILO	-8	10466	1756156	1156100000	-0.004651	0.003248	-0.007899	0.001519	0.003709	-0.002190	12099395995440	11047761748757	1051634246683
SILO	-7	10466	2868208	1156100000	0.000000	0.003248	-0.003248	0.002481	0.003709	-0.001228	12099395995440	11047761748757	1051634246683
SILO	-6	10661	7914922	1156100000	0.018690	0.003248	0.015441	0.006846	0.003709	0.003138	12325528704561	11047761748757	1277766955804
SILO	-5	10600	3345664	1156100000	-0.005750	0.003248	-0.008998	0.002894	0.003709	-0.000815	12254660000000	11047761748757	1206898251243
SILO	-4	10588	2769037	1156100000	-0.001132	0.003248	-0.004380	0.002395	0.003709	-0.001314	12240786800000	11047761748757	1193025051243
SILO	-3	10612	1873118	1156100000	0.002305	0.003248	-0.000944	0.001620	0.003709	-0.002088	12268996092035	11047761748757	1221234343278
SILO	-2	10564	3664956	1156100000	-0.004608	0.003248	-0.007856	0.003170	0.003709	-0.000539	12212462350000	11047761748757	1164700601243
SILO	-1	10686	3264384	1156100000	0.011578	0.003248	0.008329	0.002824	0.003709	-0.000885	12353853154561	11047761748757	1306091405804
SILO	0	11248	3570896	1156100000	0.052631	0.003248	0.049382	0.003089	0.003709	-0.000620	13004044245440	11047761748757	1956282496683
SILO	1	11297	2255595	1156100000	0.004347	0.003248	0.001099	0.001951	0.003709	-0.001758	13060576857965	11047761748757	2012815109208
SILO	2	11346	2854053	1156100000	0.004329	0.003248	0.001080	0.002469	0.003709	-0.001240	13117110600000	11047761748757	2069348851243
SILO	3	11199	2211430	1156100000	-0.012930	0.003248	-0.016178	0.001913	0.003709	-0.001796	12947510504561	11047761748757	1899748755804
SILO	4	11004	2954396	1156100000	-0.017474	0.003248	-0.020723	0.002555	0.003709	-0.001153	12721261507965	11047761748757	1673499759208
SILO	5	10759	2372554	1156100000	-0.022220	0.003248	-0.025468	0.002052	0.003709	-0.001656	12438595057965	11047761748757	1390833309208

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SMBR	-36	478	9342900										
SMBR	-35	468	9265900	9837678500	-0.020921	0.016977	-0.037897	0.000942	0.003386	-0.002444	4604033538000	5072634957217	-468601419217
SMBR	-34	480	15474000	9837678500	0.025641	0.016977	0.008665	0.001573	0.003386	-0.001813	4722085680000	5072634957217	-350549277217
SMBR	-33	472	14556600	9837678500	-0.016667	0.016977	-0.033643	0.001480	0.003386	-0.001907	4643384252000	5072634957217	-429250705217
SMBR	-32	466	47977100	9837678500	-0.012712	0.016977	-0.029688	0.004877	0.003386	0.001491	4584358181000	5072634957217	-488276776217
SMBR	-31	460	8905300	9837678500	-0.012876	0.016977	-0.029852	0.000905	0.003386	-0.002481	4525332110000	5072634957217	-547302847217
SMBR	-30	462	7363700	9837678500	0.004348	0.016977	-0.012629	0.000749	0.003386	-0.002638	4545007467000	5072634957217	-527627490217
SMBR	-29	464	23045200	9837678500	0.004329	0.016977	-0.012648	0.002343	0.003386	-0.001044	4564682824000	5072634957217	-507952133217
SMBR	-28	470	20588900	9837678500	0.012931	0.016977	-0.004045	0.002093	0.003386	-0.001293	4623708895000	5072634957217	-448926062217
SMBR	-27	510	73401200	9837678500	0.085106	0.016977	0.068130	0.007461	0.003386	0.004075	5017216035000	5072634957217	-55418922217
SMBR	-26	500	27280300	9837678500	-0.019608	0.016977	-0.036584	0.002773	0.003386	-0.000613	4918839250000	5072634957217	-153795707217
SMBR	-25	492	9419400	9837678500	-0.016000	0.016977	-0.032977	0.000957	0.003386	-0.002429	4840137822000	5072634957217	-232497135217
SMBR	-24	505	15314400	9837678500	0.026423	0.016977	0.009446	0.001557	0.003386	-0.001830	4968027642500	5072634957217	-104607314717
SMBR	-23	510	11969600	9837678500	0.009901	0.016977	-0.007076	0.001217	0.003386	-0.002170	5017216035000	5072634957217	-55418922217
SMBR	-22	530	48155500	9837678500	0.039216	0.016977	0.022239	0.004895	0.003386	0.001509	5213969605000	5072634957217	141334647783
SMBR	-21	525	16901900	9837678500	-0.009434	0.016977	-0.026410	0.001718	0.003386	-0.001668	5164781212500	5072634957217	92146255283
SMBR	-20	510	17146600	9837678500	-0.028571	0.016977	-0.045548	0.001743	0.003386	-0.001643	5017216035000	5072634957217	-55418922217
SMBR	-19	515	11640800	9837678500	0.009804	0.016977	-0.007173	0.001183	0.003386	-0.002203	5066404427500	5072634957217	-6230529717
SMBR	-18	515	4927400	9837678500	0.000000	0.016977	-0.016977	0.000501	0.003386	-0.002885	5066404427500	5072634957217	-6230529717
SMBR	-17	515	6633500	9837678500	0.000000	0.016977	-0.016977	0.000674	0.003386	-0.002712	5066404427500	5072634957217	-6230529717
SMBR	-16	520	10892400	9837678500	0.009709	0.016977	-0.007268	0.001107	0.003386	-0.002279	5115592820000	5072634957217	42957862783
SMBR	-15	525	13693700	9837678500	0.009615	0.016977	-0.007361	0.001392	0.003386	-0.001994	5164781212500	5072634957217	92146255283
SMBR	-14	520	9325300	9837678500	-0.009524	0.016977	-0.026500	0.000948	0.003386	-0.002438	5115592820000	5072634957217	42957862783
SMBR	-13	530	24779100	9837678500	0.019231	0.016977	0.002254	0.002519	0.003386	-0.000867	5213969605000	5072634957217	141334647783

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SMBR	-12	630	388570700	9837678500	0.188679	0.016977	0.171703	0.039498	0.003386	0.036112	6197737455000	5072634957217	1125102497783
SMBR	-11	585	42112400	9837678500	-0.071429	0.016977	-0.088405	0.004281	0.003386	0.000894	5755041922500	5072634957217	682406965283
SMBR	-10	535	58484900	9837678500	-0.085470	0.016977	-0.102447	0.005945	0.003386	0.002559	5263157997500	5072634957217	190523040283
SMBR	-9	565	23610500	9837678500	0.056075	0.016977	0.039098	0.002400	0.003386	-0.000986	5558288352500	5072634957217	485653395283
SMBR	-8	560	19000600	9837678500	-0.008850	0.016977	-0.025826	0.001931	0.003386	-0.001455	5509099960000	5072634957217	436465002783
SMBR	-7	560	5335400	9837678500	0.000000	0.016977	-0.016977	0.000542	0.003386	-0.002844	5509099960000	5072634957217	436465002783
SMBR	-6	570	13621300	9837678500	0.017857	0.016977	0.000881	0.001385	0.003386	-0.002002	5607476745000	5072634957217	534841787783
SMBR	-5	565	13588300	9837678500	-0.008772	0.016977	-0.025748	0.001381	0.003386	-0.002005	5558288352500	5072634957217	485653395283
SMBR	-4	620	176575500	9837678500	0.097345	0.016977	0.080369	0.017949	0.003386	0.014563	6099360670000	5072634957217	1026725712783
SMBR	-3	600	116594200	9837678500	-0.032258	0.016977	-0.049235	0.011852	0.003386	0.008466	5902607100000	5072634957217	829972142783
SMBR	-2	600	78547400	9837678500	0.000000	0.016977	-0.016977	0.007984	0.003386	0.004598	5902607100000	5072634957217	829972142783
SMBR	-1	600	22399000	9837678500	0.000000	0.016977	-0.016977	0.002277	0.003386	-0.001109	5902607100000	5072634957217	829972142783
SMBR	0	590	40655200	9837678500	-0.016667	0.016977	-0.033643	0.004133	0.003386	0.000746	5804230315000	5072634957217	731595357783
SMBR	1	605	11269400	9837678500	0.025424	0.016977	0.008447	0.001146	0.003386	-0.002241	5951795492500	5072634957217	879160535283
SMBR	2	600	18151000	9837678500	-0.008264	0.016977	-0.025241	0.001845	0.003386	-0.001541	5902607100000	5072634957217	829972142783
SMBR	3	595	5383000	9837678500	-0.008333	0.016977	-0.025310	0.000547	0.003386	-0.002839	5853418707500	5072634957217	780783750283
SMBR	4	610	12909200	9837678500	0.025210	0.016977	0.008234	0.001312	0.003386	-0.002074	6000983885000	5072634957217	928348927783
SMBR	5	680	133700100	9837678500	0.114754	0.016977	0.097778	0.013591	0.003386	0.010204	6689621380000	5072634957217	1616986422783

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SMSM	-36	1185	152000										
SMSM	-35	1175	192400	1439668860	-0.008439	-0.001863	-0.006576	0.000134	0.000215	-0.000082	1691610910500	1721004149725	-29393239225
SMSM	-34	1183	165200	1439668860	0.006383	-0.001863	0.008246	0.000115	0.000215	-0.000101	1702408426950	1721004149725	-18595722775
SMSM	-33	1183	193600	1439668860	0.000000	-0.001863	0.001863	0.000134	0.000215	-0.000081	1702408426950	1721004149725	-18595722775
SMSM	-32	1205	734800	1439668860	0.019027	-0.001863	0.020890	0.000510	0.000215	0.000295	1734800976300	1721004149725	13796826575
SMSM	-31	1200	810400	1439668860	-0.004149	-0.001863	-0.002286	0.000563	0.000215	0.000348	1727602632000	1721004149725	6598482275
SMSM	-30	1205	238400	1439668860	0.004167	-0.001863	0.006030	0.000166	0.000215	-0.000050	1734800976300	1721004149725	13796826575
SMSM	-29	1200	215600	1439668860	-0.004149	-0.001863	-0.002286	0.000150	0.000215	-0.000066	1727602632000	1721004149725	6598482275
SMSM	-28	1210	1052400	1439668860	0.008333	-0.001863	0.010196	0.000731	0.000215	0.000516	1741999320600	1721004149725	20995170875
SMSM	-27	1210	324000	1439668860	0.000000	-0.001863	0.001863	0.000225	0.000215	0.000010	1741999320600	1721004149725	20995170875
SMSM	-26	1208	366800	1439668860	-0.002066	-0.001863	-0.000203	0.000255	0.000215	0.000039	1738400148450	1721004149725	17395998725
SMSM	-25	1200	1298400	1439668860	-0.006211	-0.001863	-0.004348	0.000902	0.000215	0.000687	1727602632000	1721004149725	6598482275
SMSM	-24	1208	247200	1439668860	0.006250	-0.001863	0.008113	0.000172	0.000215	-0.000044	1738400148450	1721004149725	17395998725
SMSM	-23	1208	223200	1439668860	0.000000	-0.001863	0.001863	0.000155	0.000215	-0.000060	1738400148450	1721004149725	17395998725
SMSM	-22	1205	122000	1439668860	-0.002070	-0.001863	-0.000207	0.000085	0.000215	-0.000131	1734800976300	1721004149725	13796826575
SMSM	-21	1208	245200	1439668860	0.002075	-0.001863	0.003938	0.000170	0.000215	-0.000045	1738400148450	1721004149725	17395998725
SMSM	-20	1208	253600	1439668860	0.000000	-0.001863	0.001863	0.000176	0.000215	-0.000039	1738400148450	1721004149725	17395998725
SMSM	-19	1203	260400	1439668860	-0.004141	-0.001863	-0.002278	0.000181	0.000215	-0.000034	1731201804150	1721004149725	10197654425
SMSM	-18	1203	145600	1439668860	0.000000	-0.001863	0.001863	0.000101	0.000215	-0.000114	1731201804150	1721004149725	10197654425
SMSM	-17	1200	129600	1439668860	-0.002079	-0.001863	-0.000216	0.000090	0.000215	-0.000125	1727602632000	1721004149725	6598482275
SMSM	-16	1200	97600	1439668860	0.000000	-0.001863	0.001863	0.000068	0.000215	-0.000148	1727602632000	1721004149725	6598482275
SMSM	-15	1198	139600	1439668860	-0.002083	-0.001863	-0.000220	0.000097	0.000215	-0.000118	1724003459850	1721004149725	2999310125
SMSM	-14	1195	280800	1439668860	-0.002088	-0.001863	-0.000225	0.000195	0.000215	-0.000020	1720404287700	1721004149725	-599862025
SMSM	-13	1193	130400	1439668860	-0.002092	-0.001863	-0.000229	0.000091	0.000215	-0.000125	1716805115550	1721004149725	-4199034175

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
SMSM	-12	1175	168800	1439668860	-0.014675	-0.001863	-0.012812	0.000117	0.000215	-0.000098	1691610910500	1721004149725	-29393239225
SMSM	-11	1178	189600	1439668860	0.002128	-0.001863	0.003991	0.000132	0.000215	-0.000084	1695210082650	1721004149725	-25794067075
SMSM	-10	1183	275600	1439668860	0.004246	-0.001863	0.006109	0.000191	0.000215	-0.000024	1702408426950	1721004149725	-18595722775
SMSM	-9	1175	130800	1439668860	-0.006342	-0.001863	-0.004479	0.000091	0.000215	-0.000124	1691610910500	1721004149725	-29393239225
SMSM	-8	1178	229200	1439668860	0.002128	-0.001863	0.003991	0.000159	0.000215	-0.000056	1695210082650	1721004149725	-25794067075
SMSM	-7	1183	225200	1439668860	0.004246	-0.001863	0.006109	0.000156	0.000215	-0.000059	1702408426950	1721004149725	-18595722775
SMSM	-6	1190	213600	1439668860	0.006342	-0.001863	0.008206	0.000148	0.000215	-0.000067	1713205943400	1721004149725	-7798206325
SMSM	-5	1195	245600	1439668860	0.004202	-0.001863	0.006065	0.000171	0.000215	-0.000045	1720404287700	1721004149725	-599862025
SMSM	-4	1188	188800	1439668860	-0.006276	-0.001863	-0.004413	0.000131	0.000215	-0.000084	1709606771250	1721004149725	-11397378475
SMSM	-3	1183	167200	1439668860	-0.004211	-0.001863	-0.002348	0.000116	0.000215	-0.000099	1702408426950	1721004149725	-18595722775
SMSM	-2	1193	164000	1439668860	0.008879	-0.001863	0.010743	0.000114	0.000215	-0.000101	1717524949980	1721004149725	-3479199745
SMSM	-1	1193	348400	1439668860	0.000000	-0.001863	0.001863	0.000242	0.000215	0.000027	1717524949980	1721004149725	-3479199745
SMSM	0	1183	390400	1439668860	-0.008382	-0.001863	-0.006519	0.000271	0.000215	0.000056	1703128261380	1721004149725	-17875888345
SMSM	1	1180	198000	1439668860	-0.002536	-0.001863	-0.000673	0.000138	0.000215	-0.000078	1698809254800	1721004149725	-22194894925
SMSM	2	1180	735200	1439668860	0.000000	-0.001863	0.001863	0.000511	0.000215	0.000295	1698809254800	1721004149725	-22194894925
SMSM	3	1185	469200	1439668860	0.004237	-0.001863	0.006100	0.000326	0.000215	0.000111	1706007599100	1721004149725	-14996550625
SMSM	4	1183	210000	1439668860	-0.002110	-0.001863	-0.000247	0.000146	0.000215	-0.000069	1702408426950	1721004149725	-18595722775
SMSM	5	1188	266000	1439668860	0.004228	-0.001863	0.006091	0.000185	0.000215	-0.000031	1709606771250	1721004149725	-11397378475

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
TOTL	-36	695	8426500										
TOTL	-35	700	4607400	3410000000	0.007194	0.001676	0.005518	0.001351	0.001157	0.000194	2387000000000	2313116666667	73883333333
TOTL	-34	700	2720900	3410000000	0.000000	0.001676	-0.001676	0.000798	0.001157	-0.000359	2387000000000	2313116666667	73883333333
TOTL	-33	705	5258200	3410000000	0.007143	0.001676	0.005467	0.001542	0.001157	0.000385	2404050000000	2313116666667	90933333333
TOTL	-32	690	4300800	3410000000	-0.021277	0.001676	-0.022953	0.001261	0.001157	0.000104	2352900000000	2313116666667	39783333333
TOTL	-31	690	0	3410000000	0.000000	0.001676	-0.001676	0.000000	0.001157	-0.001157	2352900000000	2313116666667	39783333333
TOTL	-30	665	3273400	3410000000	-0.036232	0.001676	-0.037908	0.000960	0.001157	-0.000197	2267650000000	2313116666667	-45466666667
TOTL	-29	670	1800600	3410000000	0.007519	0.001676	0.005843	0.000528	0.001157	-0.000629	2284700000000	2313116666667	-28416666667
TOTL	-28	660	1817100	3410000000	-0.014925	0.001676	-0.016602	0.000533	0.001157	-0.000624	2250600000000	2313116666667	-62516666667
TOTL	-27	630	4	3410000000	-0.045455	0.001676	-0.047131	0.000000	0.001157	-0.001157	2148300000000	2313116666667	-164816666667
TOTL	-26	665	4	3410000000	0.055556	0.001676	0.053879	0.000000	0.001157	-0.001157	2267650000000	2313116666667	-45466666667
TOTL	-25	675	4623100	3410000000	0.015038	0.001676	0.013361	0.001356	0.001157	0.000199	2301750000000	2313116666667	-11366666667
TOTL	-24	675	4	3410000000	0.000000	0.001676	-0.001676	0.000000	0.001157	-0.001157	2301750000000	2313116666667	-11366666667
TOTL	-23	720	12390400	3410000000	0.066667	0.001676	0.064990	0.003634	0.001157	0.002476	2455200000000	2313116666667	142083333333
TOTL	-22	715	5081400	3410000000	-0.006944	0.001676	-0.008621	0.001490	0.001157	0.000333	2438150000000	2313116666667	125033333333
TOTL	-21	725	5583400	3410000000	0.013986	0.001676	0.012310	0.001637	0.001157	0.000480	2472250000000	2313116666667	159133333333
TOTL	-20	720	4911300	3410000000	-0.006897	0.001676	-0.008573	0.001440	0.001157	0.000283	2455200000000	2313116666667	142083333333
TOTL	-19	725	4	3410000000	0.006944	0.001676	0.005268	0.000000	0.001157	-0.001157	2472250000000	2313116666667	159133333333
TOTL	-18	685	8460700	3410000000	-0.055172	0.001676	-0.056849	0.002481	0.001157	0.001324	2335850000000	2313116666667	227333333333
TOTL	-17	680	2784300	3410000000	-0.007299	0.001676	-0.008975	0.000817	0.001157	-0.000341	2318800000000	2313116666667	56833333333
TOTL	-16	680	4764300	3410000000	0.000000	0.001676	-0.001676	0.001397	0.001157	0.000240	2318800000000	2313116666667	56833333333
TOTL	-15	680	6389800	3410000000	0.000000	0.001676	-0.001676	0.001874	0.001157	0.000717	2318800000000	2313116666667	56833333333
TOTL	-14	675	2658500	3410000000	-0.007353	0.001676	-0.009029	0.000780	0.001157	-0.000378	2301750000000	2313116666667	-11366666667
TOTL	-13	670	4527900	3410000000	-0.007407	0.001676	-0.009084	0.001328	0.001157	0.000171	2284700000000	2313116666667	-28416666667

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
TOTL	-12	660	4018100	3410000000	-0.014925	0.001676	-0.016602	0.001178	0.001157	0.000021	2250600000000	2313116666667	-62516666667
TOTL	-11	650	3361700	3410000000	-0.015152	0.001676	-0.016828	0.000986	0.001157	-0.000171	2216500000000	2313116666667	-96616666667
TOTL	-10	635	3880200	3410000000	-0.023077	0.001676	-0.024753	0.001138	0.001157	-0.000019	2165350000000	2313116666667	-147766666667
TOTL	-9	645	5821700	3410000000	0.015748	0.001676	0.014072	0.001707	0.001157	0.000550	2199450000000	2313116666667	-113666666667
TOTL	-8	645	4376300	3410000000	0.000000	0.001676	-0.001676	0.001283	0.001157	0.000126	2199450000000	2313116666667	-113666666667
TOTL	-7	650	6357000	3410000000	0.007752	0.001676	0.006076	0.001864	0.001157	0.000707	2216500000000	2313116666667	-96616666667
TOTL	-6	665	4617500	3410000000	0.023077	0.001676	0.021401	0.001354	0.001157	0.000197	2267650000000	2313116666667	-45466666667
TOTL	-5	735	47628000	3410000000	0.105263	0.001676	0.103587	0.013967	0.001157	0.012810	2506350000000	2313116666667	193233333333
TOTL	-4	710	8036400	3410000000	-0.034014	0.001676	-0.035690	0.002357	0.001157	0.001199	2421100000000	2313116666667	107983333333
TOTL	-3	710	7897100	3410000000	0.000000	0.001676	-0.001676	0.002316	0.001157	0.001159	2421100000000	2313116666667	107983333333
TOTL	-2	750	50599300	3410000000	0.056338	0.001676	0.054662	0.014839	0.001157	0.013681	2557500000000	2313116666667	244383333333
TOTL	-1	780	32742800	3410000000	0.040000	0.001676	0.038324	0.009602	0.001157	0.008445	2659800000000	2313116666667	346683333333
TOTL	0	765	20506200	3410000000	-0.019231	0.001676	-0.020907	0.006014	0.001157	0.004856	2608650000000	2313116666667	295533333333
TOTL	1	765	4112200	3410000000	0.000000	0.001676	-0.001676	0.001206	0.001157	0.000049	2608650000000	2313116666667	295533333333
TOTL	2	770	8119700	3410000000	0.006536	0.001676	0.004860	0.002381	0.001157	0.001224	2625700000000	2313116666667	312583333333
TOTL	3	760	3744700	3410000000	-0.012987	0.001676	-0.014663	0.001098	0.001157	-0.000059	2591600000000	2313116666667	278483333333
TOTL	4	780	6170800	3410000000	0.026316	0.001676	0.024640	0.001810	0.001157	0.000652	2659800000000	2313116666667	346683333333
TOTL	5	770	5417000	3410000000	-0.012821	0.001676	-0.014497	0.001589	0.001157	0.000431	2625700000000	2313116666667	312583333333

Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
WTON	-36	910	14758200										
WTON	-35	915	9102900	8715466600	0.005495	0.000327	0.005168	0.001044	0.001376	-0.000332	7974651939000	7986272561133	-11620622133
WTON	-34	910	16072800	8715466600	-0.005464	0.000327	-0.005791	0.001844	0.001376	0.000468	7931074606000	7986272561133	-55197955133
WTON	-33	900	6675900	8715466600	-0.010989	0.000327	-0.011316	0.000766	0.001376	-0.000610	7843919940000	7986272561133	-142352621133
WTON	-32	880	16263000	8715466600	-0.022222	0.000327	-0.022549	0.001866	0.001376	0.000490	7669610608000	7986272561133	-316661953133
WTON	-31	885	7399700	8715466600	0.005682	0.000327	0.005355	0.000849	0.001376	-0.000527	7713187941000	7986272561133	-273084620133
WTON	-30	885	7992300	8715466600	0.000000	0.000327	-0.000327	0.000917	0.001376	-0.000459	7713187941000	7986272561133	-273084620133
WTON	-29	910	9940900	8715466600	0.028249	0.000327	0.027922	0.001141	0.001376	-0.000236	7931074606000	7986272561133	-55197955133
WTON	-28	885	8176600	8715466600	-0.027473	0.000327	-0.027799	0.000938	0.001376	-0.000438	7713187941000	7986272561133	-273084620133
WTON	-27	885	3742600	8715466600	0.000000	0.000327	-0.000327	0.000429	0.001376	-0.000947	7713187941000	7986272561133	-273084620133
WTON	-26	905	21617200	8715466600	0.022599	0.000327	0.022272	0.002480	0.001376	0.001104	7887497273000	7986272561133	-98775288133
WTON	-25	895	9175600	8715466600	-0.011050	0.000327	-0.011377	0.001053	0.001376	-0.000323	7800342607000	7986272561133	-185929954133
WTON	-24	900	6349400	8715466600	0.005587	0.000327	0.005260	0.000729	0.001376	-0.000648	7843919940000	7986272561133	-142352621133
WTON	-23	900	5323600	8715466600	0.000000	0.000327	-0.000327	0.000611	0.001376	-0.000765	7843919940000	7986272561133	-142352621133
WTON	-22	920	12301200	8715466600	0.022222	0.000327	0.021895	0.001411	0.001376	0.000035	8018229272000	7986272561133	31956710867
WTON	-21	930	33345000	8715466600	0.010870	0.000327	0.010543	0.003826	0.001376	0.002450	8105383938000	7986272561133	119111376867
WTON	-20	915	12827400	8715466600	-0.016129	0.000327	-0.016456	0.001472	0.001376	0.000096	7974651939000	7986272561133	-11620622133
WTON	-19	915	2892700	8715466600	0.000000	0.000327	-0.000327	0.000332	0.001376	-0.001044	7974651939000	7986272561133	-11620622133
WTON	-18	905	9822200	8715466600	-0.010929	0.000327	-0.011256	0.001127	0.001376	-0.000249	7887497273000	7986272561133	-98775288133
WTON	-17	920	26699400	8715466600	0.016575	0.000327	0.016248	0.003063	0.001376	0.001687	8018229272000	7986272561133	31956710867
WTON	-16	940	30579000	8715466600	0.021739	0.000327	0.021412	0.003509	0.001376	0.002132	8192538604000	7986272561133	206266042867
WTON	-15	945	17275200	8715466600	0.005319	0.000327	0.004992	0.001982	0.001376	0.000606	8236115937000	7986272561133	249843375867
WTON	-14	930	7665600	8715466600	-0.015873	0.000327	-0.016200	0.000880	0.001376	-0.000497	8105383938000	7986272561133	119111376867
WTON	-13	935	19440800	8715466600	0.005376	0.000327	0.005049	0.002231	0.001376	0.000854	8148961271000	7986272561133	162688709867



Code	Day	Current Price	Volume	Outstanding Share	Return	Expected Return	Abnormal Return	Trading Volume	Mean of Trading Volume	Abnormal Trading Volume	Market Capitalization	Mean of Market Capitalization	Abnormal Market Capitalization
WTON	-12	925	4092800	8715466600	-0.010695	0.000327	-0.011022	0.000470	0.001376	-0.000907	8061806605000	7986272561133	75534043867
WTON	-11	935	9861600	8715466600	0.010811	0.000327	0.010484	0.001132	0.001376	-0.000245	8148961271000	7986272561133	162688709867
WTON	-10	940	11286400	8715466600	0.005348	0.000327	0.005021	0.001295	0.001376	-0.000081	8192538604000	7986272561133	206266042867
WTON	-9	950	15940300	8715466600	0.010638	0.000327	0.010311	0.001829	0.001376	0.000453	8279693270000	7986272561133	293420708867
WTON	-8	940	6500300	8715466600	-0.010526	0.000327	-0.010853	0.000746	0.001376	-0.000630	8192538604000	7986272561133	206266042867
WTON	-7	940	5894100	8715466600	0.000000	0.000327	-0.000327	0.000676	0.001376	-0.000700	8192538604000	7986272561133	206266042867
WTON	-6	950	5563600	8715466600	0.010638	0.000327	0.010311	0.000638	0.001376	-0.000738	8279693270000	7986272561133	293420708867
WTON	-5	965	19702900	8715466600	0.015789	0.000327	0.015463	0.002261	0.001376	0.000885	8410425269000	7986272561133	424152707867
WTON	-4	975	4575700	8715466600	0.010363	0.000327	0.010036	0.000525	0.001376	-0.000851	8497579935000	7986272561133	511307373867
WTON	-3	980	13986000	8715466600	0.005128	0.000327	0.004801	0.001605	0.001376	0.000229	8541157268000	7986272561133	554884706867
WTON	-2	980	16643800	8715466600	0.000000	0.000327	-0.000327	0.001910	0.001376	0.000534	8541157268000	7986272561133	554884706867
WTON	-1	990	14356000	8715466600	0.010204	0.000327	0.009877	0.001647	0.001376	0.000271	8628311934000	7986272561133	642039372867
WTON	0	995	19403800	8715466600	0.005051	0.000327	0.004724	0.002226	0.001376	0.000850	8671889267000	7986272561133	685616705867
WTON	1	995	49720400	8715466600	0.000000	0.000327	-0.000327	0.005705	0.001376	0.004329	8671889267000	7986272561133	685616705867
WTON	2	985	35106900	8715466600	-0.010050	0.000327	-0.010377	0.004028	0.001376	0.002652	8584734601000	7986272561133	598462039867
WTON	3	980	21697100	8715466600	-0.005076	0.000327	-0.005403	0.002489	0.001376	0.001113	8541157268000	7986272561133	554884706867
WTON	4	985	10203700	8715466600	0.005102	0.000327	0.004775	0.001171	0.001376	-0.000205	8584734601000	7986272561133	598462039867
WTON	5	985	11957300	8715466600	0.000000	0.000327	-0.000327	0.001372	0.001376	-0.000004	8584734601000	7986272561133	598462039867

Code	T-5	T-4	T-3	T-2	T-1	T=0	T+1	T+2	T+3	T+4	T+5
ACES	0.105123	0.012553	-0.012933	-0.023240	0.018002	-0.002831	-0.094668	0.036494	0.024196	0.028747	-0.023240
ACST	0.045568	-0.014833	0.006802	0.012974	0.006686	-0.011644	-0.005621	-0.005660	0.022427	-0.039204	0.041953
ARNA	0.009071	0.000668	-0.007666	-0.007736	0.000668	-0.024756	0.044146	0.017334	-0.023923	0.051088	-0.015332
ASSA	-0.011954	-0.003182	-0.020650	0.014362	-0.037595	-0.011954	-0.003182	0.005437	-0.029048	-0.020650	0.005590
BEST	0.010085	-0.004953	-0.027175	0.010199	0.017436	-0.048748	0.033215	0.009753	-0.012199	-0.026850	0.002510
BISI	0.006206	-0.004583	0.000786	0.006141	0.000757	0.003403	-0.001902	0.000736	-0.004534	-0.004541	-0.009839
CSAP	0.010024	-0.003634	0.014528	-0.012562	0.005437	0.000891	0.018991	0.009780	-0.029946	0.023618	-0.016887
ELSA	-0.010261	-0.010343	-0.028775	0.017616	0.008007	0.007922	-0.010343	-0.001252	0.007922	-0.019434	0.008007
LINK	0.005532	0.020112	-0.006612	0.002957	-0.001839	-0.011386	0.022257	0.000514	-0.001839	-0.013576	-0.004215
LPCK	0.017352	0.010379	-0.012900	-0.016433	0.013997	0.007079	0.017068	0.020082	-0.022235	-0.029358	0.027556
LPPF	0.019637	0.007933	-0.024482	0.018259	-0.000850	-0.025850	0.032484	-0.008294	0.086650	-0.046827	0.001560
MIKA	0.026193	-0.026947	0.006963	-0.004546	0.033753	0.036307	-0.015015	-0.004353	0.013816	-0.011482	-0.022469
MTDL	0.012980	-0.007365	0.003555	-0.005160	0.003555	-0.006609	0.014111	-0.006991	-0.000812	0.006182	-0.000812
NRCA	0.019421	-0.004645	-0.012708	0.019552	-0.012708	0.027682	-0.012581	0.003292	0.027485	0.011166	-0.012333
RAJA	0.025769	0.025071	-0.001016	-0.026440	0.016375	-0.009563	0.033466	-0.042683	0.016375	0.016078	-0.009420
RALS	0.069165	0.001696	-0.008613	-0.008613	-0.008613	0.042407	-0.008613	0.030222	-0.041323	-0.003782	-0.037459
ROTI	0.032037	0.007435	0.000678	0.004034	0.004023	0.000678	0.037345	0.016755	-0.030967	0.030090	0.035599
SAME	0.012467	0.005388	0.005376	-0.008477	0.005400	0.005388	0.005376	-0.001556	0.001904	0.008848	-0.001545
SCMA	0.015103	0.002862	-0.000141	0.005847	-0.006093	-0.003135	-0.000141	-0.006147	0.002881	-0.012189	0.002908
SIDO	0.007583	0.026721	0.016566	-0.020474	0.007220	-0.011385	-0.011471	0.026177	-0.011300	-0.039162	-0.002125
SILO	-0.008998	-0.004380	-0.000944	-0.007856	0.008329	0.049382	0.001099	0.001080	-0.016178	-0.020723	-0.025468
SMBR	-0.025748	0.080369	-0.049235	-0.016977	-0.016977	-0.033643	0.008447	-0.025241	-0.025310	0.008234	0.097778
SMSM	0.006065	-0.004413	-0.002348	0.010743	0.001863	-0.006519	-0.000673	0.001863	0.006100	-0.000247	0.006091
TOTL	0.103587	-0.035690	-0.001676	0.054662	0.038324	-0.020907	-0.001676	0.004860	-0.014663	0.024640	-0.014497
WTON	0.015463	0.010036	0.004801	-0.000327	0.009877	0.004724	-0.000327	-0.010377	-0.005403	0.004775	-0.000327

Code	T-5	T-4	T-3	T-2	T-1	T=0	T+1	T+2	T+3	T+4	T+5
ACES	0.000044	-0.000105	0.000054	0.000165	-0.000072	-0.000081	-0.000069	0.000675	0.000325	0.000874	0.000194
ACST	0.003503	0.003055	0.001755	0.004825	-0.000173	0.001050	-0.000256	0.000251	-0.000371	-0.000044	0.002927
ARNA	0.000011	-0.000085	-0.000320	-0.000149	-0.000357	0.000115	-0.000187	0.003930	-0.000024	0.003057	0.001448
ASSA	-0.000386	0.000148	0.000287	0.000211	-0.000389	-0.000513	0.000071	0.000765	0.002889	-0.000134	-0.000075
BEST	0.024535	0.007495	0.003687	0.002854	0.000633	0.002266	0.000283	0.001414	-0.001750	-0.000095	0.005782
BISI	0.000308	-0.000169	-0.000077	-0.000177	-0.000242	-0.000198	-0.000140	-0.000046	-0.000263	0.000037	-0.000188
CSAP	-0.001027	0.001030	-0.000664	0.000996	0.000754	0.000531	-0.000774	0.000535	0.001053	-0.000711	-0.000257
ELSA	-0.003121	0.011329	-0.001222	0.000757	0.000865	0.001230	-0.002442	-0.000552	0.000745	-0.001376	-0.002777
LINK	0.000065	0.000379	0.000182	0.000163	0.000317	0.000569	0.000453	0.000246	0.000715	0.000723	0.000465
LPCK	0.001178	0.000612	0.000473	0.000538	0.000859	0.001028	0.000082	0.001209	-0.000337	0.000273	0.000163
LPPF	-0.000203	0.000237	-0.000049	0.000461	0.000448	0.001115	0.000115	0.000026	-0.000665	0.002798	0.000764
MIKA	-0.000176	0.000004	0.000127	-0.000087	0.000210	0.000028	-0.000100	0.000101	0.000142	0.000194	-0.000092
MTDL	-0.000189	-0.000190	-0.000153	-0.000194	-0.000209	-0.000206	-0.000205	-0.000203	-0.000192	-0.000067	-0.000206
NRCA	-0.000468	-0.000193	-0.000527	-0.000131	-0.000449	-0.000563	0.000998	-0.000515	-0.000342	-0.000568	-0.000228
RAJA	-0.001334	-0.002164	0.000210	-0.001583	-0.000367	-0.001419	-0.001817	0.000310	-0.001469	-0.001499	-0.000624
RALS	0.002123	0.000300	-0.001014	-0.000114	0.000383	0.001497	0.001245	0.002998	-0.000681	0.002054	0.000573
ROTI	0.000192	0.000015	-0.000073	-0.000036	-0.000012	0.000382	0.000783	0.000879	0.000102	0.000599	0.000859
SAME	0.000099	-0.000188	0.000526	-0.000295	0.000141	-0.000095	0.000091	0.000057	-0.000184	0.000021	-0.000194
SCMA	0.000418	-0.000195	-0.000224	0.000003	-0.000265	-0.000070	0.000258	-0.000099	-0.000024	0.000407	-0.000005
SIDO	-0.000256	0.000115	-0.000005	0.000016	-0.000034	-0.000052	0.000151	0.000002	0.000280	0.000414	0.000242
SILO	-0.000815	-0.001314	-0.002088	-0.000539	-0.000885	-0.000620	-0.001758	-0.001240	-0.001796	-0.001153	-0.001656
SMBR	-0.002005	0.014563	0.008466	0.004598	-0.001109	0.000746	-0.002241	-0.001541	-0.002839	-0.002074	0.010204
SMSM	-0.000045	-0.000084	-0.000099	-0.000101	0.000027	0.000056	-0.000078	0.000295	0.000111	-0.000069	-0.000031
TOTL	0.012810	0.001199	0.001159	0.013681	0.008445	0.004856	0.000049	0.001224	-0.000059	0.000652	0.000431
WTON	0.000885	-0.000851	0.000229	0.000534	0.000271	0.000850	0.004329	0.002652	0.001113	-0.000205	-0.000004

Code	T-5	T-4	T-3	T-2	T-1	T=0
ACES	1560650000000	1817900000000	1646400000000	1303400000000	1646400000000	1646400000000
ACST	-63352119017	-98352119017	-84352119017	-56352119017	-42352119017	-70352119017
ARNA	17130005611	17130005611	-19577149269	-56284304149	-56284304149	-166405768789
ASSA	-2944500000	453000000	-2944500000	7248000000	-2944500000	-2944500000
BEST	-3537347422	-3537347422	-61421214322	-22831969722	35051897178	-80715836622
BISI	565000000000	550000000000	565000000000	610000000000	625000000000	655000000000
CSAP	32562233914	24456128074	48774445594	24456128074	32562233914	32562233914
ELSA	17273116667	-19219383333	-128696883333	-55711883333	-19219383333	17273116667
LINK	-244426167181	29412277379	-31440710301	29412277379	29412277379	-92293697981
LPCK	243020000000	295220000000	225620000000	138620000000	208220000000	243020000000
LPPF	3584176041600	4094811705600	2708800617600	3803019897600	3803019897600	2344060857600
MIKA	1362918938667	344367418667	635382138667	489874778667	1799441018667	3254514618667
MTDL	66654972338	56185324578	63115833852	56185324578	63115833852	53875154820
NRCA	832086115	-11649205605	-36611789045	-11649205605	-36611789045	832086115
RAJA	44983810250	69446305250	69446305250	44983810250	61292140250	53137975250
RALS	1234704000000	1305664000000	1305664000000	1305664000000	1305664000000	1660464000000
ROTI	218501033333	269119033333	269119033333	294428033333	319737033333	319737033333
SAME	6450666667	8810666667	11170666667	4090666667	6450666667	8810666667
SCMA	431337236403	577553248743	577553248743	869985273423	577553248743	431337236403
SIDO	117500000000	342500000000	492500000000	342500000000	417500000000	342500000000
SILO	1206898251243	1193025051243	1221234343278	1164700601243	1306091405804	1956282496683
SMBR	485653395283	1026725712783	829972142783	829972142783	829972142783	731595357783
SMSM	-599862025	-11397378475	-18595722775	-3479199745	-3479199745	-17875888345
TOTL	193233333333	107983333333	107983333333	244383333333	346683333333	295533333333
WTON	424152707867	511307373867	554884706867	554884706867	642039372867	685616705867

<b>Code</b>	<b>T+1</b>	<b>T+2</b>	<b>T+3</b>	<b>T+4</b>	<b>T+5</b>
ACES	102900000000	703150000000	1131900000000	1646400000000	1303400000000
ACST	-84352119017	-98352119017	-49352119017	-140352119017	-49352119017
ARNA	17130005611	90544315371	-19577149269	200665780011	127251470251
ASSA	453000000	7248000000	453000000	-2944500000	3850500000
BEST	15757274878	54346519478	35051897178	-22831969722	-3537347422
BISI	655000000000	670000000000	655000000000	640000000000	595000000000
CSAP	64986657274	81198868954	24456128074	64986657274	32562233914
ELSA	-19219383333	-19219383333	17273116667	-55711883333	-19219383333
LINK	211971240419	242397734259	242397734259	90265265059	59838771219
LPCCK	330020000000	434420000000	312620000000	156020000000	295220000000
LPPF	4240707609600	3803019897600	8909376537600	5991458457600	6137354361600
MIKA	2672485178667	2526977818667	3109007258667	2672485178667	1799441018667
MTDL	77524362633	67586007714	67586007714	78764893761	78764893761
NRCA	-24130497325	-24130497325	13313377835	25794669555	832086115
RAJA	85754635250	44983810250	61292140250	77600470250	69446305250
RALS	1660464000000	1944304000000	1695944000000	1731424000000	1518544000000
ROTI	598136033333	724681033333	471591033333	699372033333	977771033333
SAME	11170666667	8810666667	8810666667	13530666667	11170666667
SCMA	431337236403	138905211723	285121224063	-299742825297	-153526812957
SIDO	267500000000	492500000000	417500000000	117500000000	117500000000
SILO	2012815109208	2069348851243	1899748755804	1673499759208	1390833309208
SMBR	879160535283	829972142783	780783750283	928348927783	1616986422783
SMSM	-22194894925	-22194894925	-14996550625	-18595722775	-11397378475
TOTL	295533333333	312583333333	278483333333	346683333333	312583333333
WTON	685616705867	598462039867	554884706867	598462039867	598462039867

## Appendix 2: Test Results

**Descriptive Statistics**

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
T(-5,+5)	25	-.11	.14	.0244	.01030	.05151
T(-4,+4)	25	-.11	.07	.0023	.00797	.03986
T(-3,+3)	25	-.16	.08	.0019	.00954	.04771
T(-2,+2)	25	-.08	.08	.0106	.00739	.03697
T(-1,+1)	25	-.08	.06	.0070	.00634	.03172
Valid N (listwise)	25					

**One-Sample Test**

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
T(-5,+5)	2.365	24	.026	.02436	.0031	.0456
T(-4,+4)	.291	24	.773	.00232	-.0141	.0188
T(-3,+3)	.194	24	.848	.00185	-.0178	.0215
T(-2,+2)	1.429	24	.166	.01056	-.0047	.0258
T(-1,+1)	1.096	24	.284	.00695	-.0061	.0200

### Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
T(-5,+5)	25	-.01	.05	.0064	.00285	.01424
T(-4,+4)	25	-.01	.03	.0042	.00174	.00871
T(-3,+3)	25	-.01	.03	.0027	.00139	.00693
T(-2,+2)	25	-.01	.03	.0024	.00126	.00628
T(-1,+1)	25	.00	.01	.0008	.00065	.00325
Valid N (listwise)	25					

### One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
T(-5,+5)	2.246	24	.034	.00640	.0005	.0123
T(-4,+4)	2.435	24	.023	.00424	.0006	.0078
T(-3,+3)	1.933	24	.065	.00268	-.0002	.0055
T(-2,+2)	1.908	24	.068	.00240	-.0002	.0050
T(-1,+1)	1.237	24	.228	.00081	-.0005	.0021

Descriptive Statistics						
	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
T(-5,+5)	25	- 836873309183. 00	49419805881600. 00	6432521987520. 7190	218727770737 0.65550	1093638853685 3.27700
T(-4,+4)	25	- 724169071150. 00	39698275478400. 00	5300179937984. 3200	177525814539 4.45000	8876290726972. 25000
T(-3,+3)	25	- 485464833117. 00	29612005315200. 00	4111740007444. 4004	134856964998 1.40970	6742848249907. 04900
T(-2,+2)	25	- 351760595083. 00	17993828160000. 00	2838234024340. 8394	873538837728. 64950	4367694188643. 24760
T(-1,+1)	25	- 205560067328. 00	10387788364800. 00	1734512278370. 1600	537379836250. 05240	2686899181250. 26200
Valid N (listwise)	25					

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
T(-5,+5)	2.941	24	.007	6432521987520.72000	1918202673397.6855	10946841301643.7540
T(-4,+4)	2.986	24	.006	5300179937984.32000	1636227205186.5283	8964132670782.1130
T(-3,+3)	3.049	24	.006	4111740007444.40000	1328429046592.7476	6895050968296.0530
T(-2,+2)	3.249	24	.003	2838234024340.84000	1035338473626.5854	4641129575055.0940
T(-1,+1)	3.228	24	.004	1734512278370.16000	625414807285.8481	2843609749454.4717



### Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
T-5	25	-.03	.11	.0207	.00627	.03136
T-4	25	-.04	.08	.0035	.00427	.02135
T-3	25	-.05	.02	-.0063	.00299	.01493
T-2	25	-.03	.05	.0007	.00351	.01754
T-1	25	-.04	.04	.0046	.00305	.01523
T=0	25	-.05	.05	-.0017	.00454	.02272
T+1	25	-.09	.04	.0041	.00538	.02690
T+2	25	-.04	.04	.0029	.00335	.01677
T+3	25	-.04	.09	-.0024	.00528	.02638
T+4	25	-.05	.05	-.0030	.00491	.02454
T+5	25	-.04	.10	.0013	.00542	.02711
Valid N (listwise)	25					